State Energy Conservation Office (SECO)
Municipally Owned Utility (MOU) or Electric Cooperative (Co-op)
SB-924 Energy Efficiency Report
Data Entry Form

MOU or Co-op:	Trinity Valley Electric Cooperative
County:	Kaufman
Contact:	Jeff Lane
Contact Title:	Manager of Communications
Address:	1800 East Hwy 243
City:	Kaufman
Zip:	75142
Phone:	469-376-2222
Fax:	972-932-6466
E-mail Address:	jlane@tvec.coop

1) Is your MOU or Co-op hereby reporting on energy efficiency as required by SB-924, PURA Sections 39.9051 and 39.9052?

[✓] Yes [ ] No

2) Energy Efficiency Goals: Please tell us about the goals that your MOU or Co-op has related to energy efficiency:

Instructions: Provide a brief description of your MOU or Co-op's energy efficiency goals for the previous calendar year. Examples may include information about energy efficiency for MOU or Co-op customers or utility facilities. Supplemental information may be provided at your option on any long-term energy efficiency goals that your MOU or Co-op might have. Please use a separate sheet of paper if you need more space.

It is the policy of the cooperative to examine its own use of energy and to carry out an energy management program that encourages conservation to its members and major groups involved in housing, including the building industry and local government organizations.(See attached Board Policy 403)

3) Your MOU or Co-op's Energy Efficiency Programs:

Instructions: Input information as applicable; add fields as necessary. For the previous calendar year, please list energy efficiency programs and provide applicable estimated achieved savings – energy and/or demand, or other program performance metric (for example participation.) Add additional lines as needed.

Energy Efficiency Program	Estimated Energy Savings or	Estimated Demand Savings or	Other Program Performance Metric
Residential/Commercial Energy Audits – 39 conducted in 2011	Unavailable	Unavailable	Unavailable
Energy management presentations to the following organizations: -Community Service Workshops: Nine per year -Agri-Life Child Care Conferences: Twice per year	Unavailable	Unavailable	Unavailable

-Master Wellness Volunteer: Once per year -Kaufman Senior Citizens: Once per year -Diabetes Organization-Do Well Be Well Group: Once per year -Kaufman County Leadership Advisory Board: Once per year -Henderson County Master Gardeners			
Provide energy conservation kits to 26 area schools.	Unavailable	Unavailable	Unavailable
Totals			

4) Program Materials / Additional Information

Instructions: Public information about your energy efficiency programs (brochures, website information, etc.) may be attached and provided with this form.

5) Please submit this form to SECO at: SB924.Reporting@cpa.state.tx.us

Requirement 2:
Energy Efficiency Goals

Trinity Valley Electric Cooperative, Inc.

Kaufman, Texas

BOARD POLICY 403

ENERGY CONSERVATION

I. OBJECTIVE

To establish policy concerning use of energy by the Cooperative and its members, particularly in regard to effectiveness, efficiency, and conservation of energy. This objective is consistent with the utility responsibilities of a full-service cooperative and its prime concern for members needs.

II. POLICY

It shall be the policy of Trinity Valley Electric Cooperative to:

A. Constantly examine its own use of energy. This includes, but is not limited to, plant engineering design and construction, lighting and climate control and use of vehicles.

B. Develop and carry out a system-wide program of energy management including energy conservation, adequate home insulation and weatherization, efficient irrigation and other farm and business uses. Alternate energy sources will be appropriately considered.

C. Develop and carry out an information program so that the need for energy management is understood along with understanding of what each member can do to meet energy use needs most effectively.

D. Develop and carry out an information and education program with major groups involved in housing, including the building industry and local government organizations, to assure understanding and coordination in methods of energy management.

E. Develop training as appropriate for all employees.

III. RESPONSIBILITY

The General Manager/CEO shall have responsibility for the implementation of this policy.

Howard Tillison, Board Chairman

February 28, 2012
Date

Trinity Valley Electric Cooperative
FEB 2 8 2012
Approved
Board of Directors

Requirement 3:Energy Efficiency Programs

Trinity Valley Electric Cooperative does not track estimated energy savings for residential or commercial consumers. We offer to members estimated energy savings in percentages for various energy conservation improvements; however, we do not feel that it is realistic to associate a monetary value to those savings. There are too many factors that affect a members bill to determine how much of a reduced bill was due to energy savings versus other factors such as weather, wholesale power costs, reduced/increased power cost recovery factor, etc.

Requirement 4:
Program Materials/Additional Information

Website Information

www.tvec.net

A Touchstone Energy® Cooperative

Energy Management

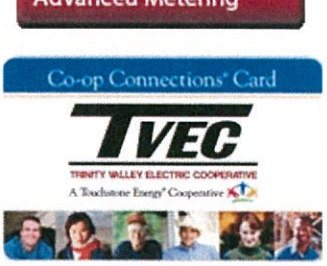
Home Energy Audits

As a special service to our members, we offer free Home Energy Audits. Upon request, trained TVEC personnel will visit your home and offer advice on ways you can improve the management of your energy usage. If you are interested in this valuable service, call our Member Service Department toll-free at 800-766-9576 for an appointment. We will be happy to explain the details.

TogetherWeSave

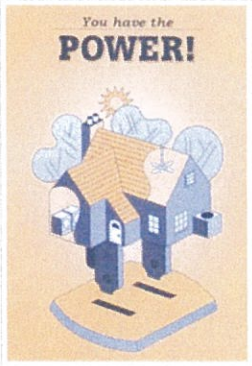
The Department of Energy estimates that by 2035 residential demand for electricity will increase 24% above 2008 levels. We want to work with you to keep your electric bill affordable. Find out how you can save by visiting www.togetherwesave.com

You Have the Power



MISSION STATEMENT: At Trinity Valley Electric Cooperative, we are committed to our member-owners to deliver safe and reliable electric power at a competitive price, with a strong emphasis on member service, community and sound business practices.

Download your copy of You Have The Power, a free guide to help lower your utility costs by using energy wisely. This guide will give you all the information you need to manage energy effectively in your home or business. Remember, doing all you can to effectively manage energy use will have a direct impact on your energy costs and quality of life. As a co-op member, that's the kind of power you have. Download your copy here.



Becoming Energy Wise

In this 13-minute video, consumers learn how to reduce their energy costs. The video demonstrates simple, effective improvements to make homes more energy efficient. Contact Bobbi Byford at (469) 376-2234 for more information.

Energy Tips

The following tips will help you make your home safer. more energy efficient and a more comfortable place to live. By following these simple tips, you can be health-wise and energy-conscious.

Set the thermostat from 76 degrees to 78 degrees in the summer months.
Set the thermostat from 68 degrees to 70 degrees in the winter months.
Use fans to circulate air to help stay comfortable.
Use curtains, drapes or blinds to help control the temperature inside your home.
Repair or replace broken or cracked windows.
Change or clean your heating/cooling unit filter once a month.
Run dishwasher and washing machine only when they are fully loaded.
Insulate hot water pipes and ducts wherever they run in unheated areas.
Replace older, inefficient appliances with new energy-efficient models.

Weatherizing

Put a draft stopper along cracks, beneath doors and windows.
Place movable insulation in windows to block heat gain during the summer and keep heat indoors during the winter.
Use caulk and weather stripping around doors and windows to prevent air leakage.
Install inexpensive gaskets around light switches and electrical outlets to seal against air leaks.

Water Heating

Check your water heater thermostat setting. If the thermostat is set between 140 degrees and 160 degrees, or "high", you can reduce the setting to between 110 degrees and 120 degrees, or "medium", and save at least $20 a year with an electric water heater or $10 a year with a gas water heater. The lower thermostat setting can also prevent scalding.
Look for and repair leaky faucets.
Replace your showerhead with a low-flow showerhead. This can reduce the flow of water from 8 gallons to 3 gallons per minute, and save up to 4,000 gallons of water a year.
Run your dishwasher and washing machine only when they are fully loaded.
Save even more hot water by using a cold water laundry detergent so you can wash and rinse with cold water. Normally, only very greasy clothes need to be washed in warm or hot water.

Lighting

Replace two bulbs with one bulb that produces a similar amount of light. For instance, you could replace 60-watt bulbs with one 100-watt bulb. However, be sure that the fixture is rated to use the higher wattage bulb.
Change to fluorescent lamps wherever possible by replacing the entire fixture or by changing from incandescent to compact, fluorescent bulbs. The initial cost of a compact, fluorescent bulb is more than an incandescent bulb, but it can last up to 12 times longer and produce less heat, which will reduce the load on your air conditioner.

Cooking

Cook several foods at one time when using your oven. Prepare dishes that can be stored or frozen for later use.
Bake food in glass pans. Glass pans allow you to reduce the oven temperature by 25 degrees.
Use small cooking appliances, such as deep fryers, electric skillets, toaster ovens, microwave ovens and pressure cookers. These appliances use less energy than your range or oven.
Match the size of the pan to the heating element when cooking on the stove. More heat will get to the pan and less will be lost to the surrounding air.
Place lids on pots when cooking to retain the heat. This will help your food cook faster and keep vitamins from going up in steam.

TVEC Trinity Valley Electric Cooperative, Inc.

TOGETHERWESAVE $39,039,125

64 Like 120 Tweet 45

Home | Add Up Your Savings | Share Your Story | Energy Saving Forum | Watch & Learn | Energy Saving Applications | Links & Resources | Contact Us

What can you do?

Pull the plug	$0
Adjust your water heater	$0
Turn off the lights	$0
Install CFLs	$0
Upgrade your refrigerator	$0
Upgrade your HVAC	$0
Upgrade your dishwasher	$0
Seal your air ducts	$0
Upgrade washing machine	$0
Change your air filter	$0
Seal the cracks	$0
Adjust the blinds	$0
Add insulation	$0
Adjust your thermostat	$0

TOTAL SAVED: $0

Calculation Assumptions

Assumptions | Privacy Information | Legal Information | Take the TogetherWeSave.com Survey |

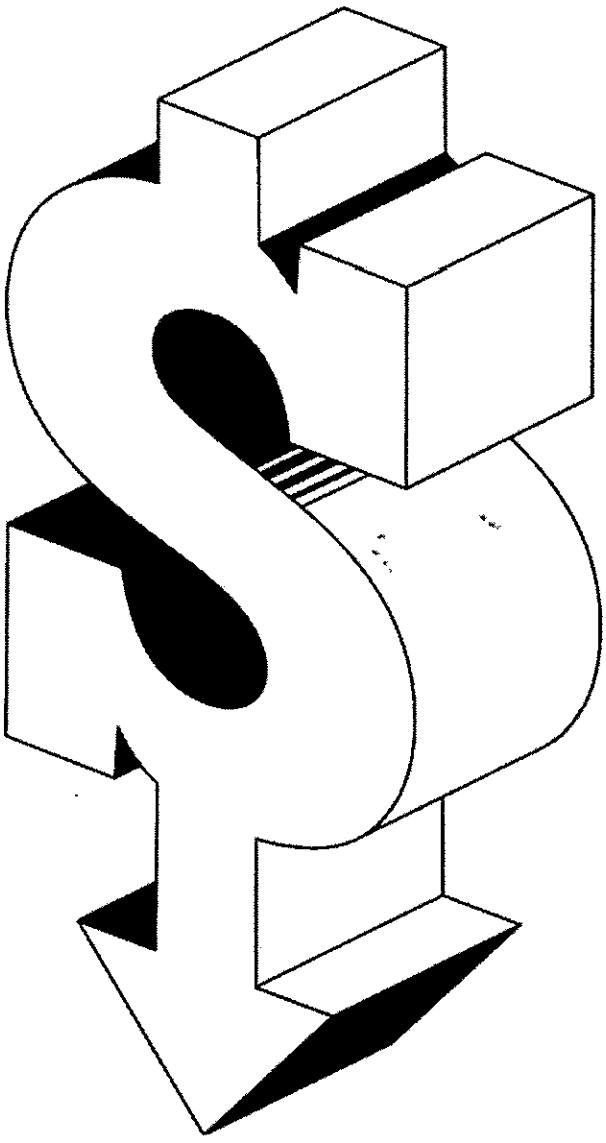
You have the

POWER!

A Guide to Cost-Cutting Conservation Measures

A Guide to Lowering Utility Costs by Using Energy Wisely

One of the best things about being a member of an electric cooperative is that you have the power to directly affect what you pay for energy.



When all co-op members make the effort to manage their energy use more effectively, the result is that the co-op ultimately doesn't need to buy as much energy to serve members' needs. That means that the cost of energy comes down for everyone in the co-op. Not only that, you'll also be helping to reduce your co-op's dependence on power generated by fossil fuels. That means cleaner air for everyone.

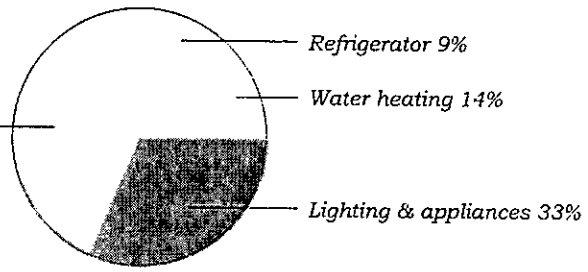
This guide is designed to give you all the information you need to manage energy effectively in your home or business. You'll learn how to make the most efficient use of energy in everything from heating and cooling systems to lighting and appliances. There are tips on saving energy in small ways every day, as well as detailed information about taking energy efficiency into account when it's time to replace major appliances or if you're undertaking a major home renovation.

Remember, doing all you can to effectively manage energy use will have a direct impact on your energy costs and quality of life. As a co-op member, that's the kind of power you have.

Heating and Cooling

Because you spend the largest portion of your energy dollars staying warm or cool, you'll save the most on energy by taking steps to use your heating and cooling systems more efficiently. Follow the tips on the next few pages, and you can reduce your heating and cooling bills by as much as 50 percent.

Heating and Cooling: The Biggest Piece of the Energy Pie



Adapted from the U.S. Department of Energy's Energy Savers booklet, available at www.eere.energy.gov.

Simple Steps You Can Take to Save on Heating and Cooling

There are many simple, low-cost (or no-cost) things you can do every day to reduce your use of energy for heating and cooling, such as setting your thermostat appropriately or using ceiling fans to circulate heated or cooled air more effectively.

Set Your Thermostat on "Savings"

The single best way to reduce heating and cooling costs is to set your thermostat at 78° or higher in summer and 68° or lower in winter. If you're keeping your thermostat at 72° in the summer, consider this: According to the U.S. Department of Energy, raising that setting to 78° could save you up to 47 percent on cooling costs.

You'll save additionally by greater adjustments to your thermostat (higher in summer, lower in winter) while you are away from home or asleep. When you return or wake up, don't set it at an unnaturally lower or higher setting to try to cool or heat the house faster. That doesn't work; it just cools or heats the house more than you need, which uses more energy.

Do keep in mind that if you have an infant or an older person living in your home, they may require cooler or warmer temperatures to stay healthy. Use your common sense.

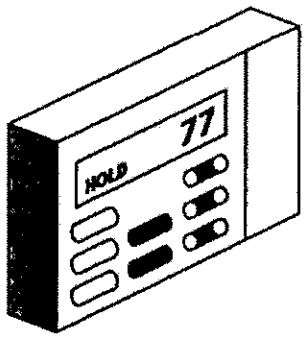
Every degree above 78 that you set your thermostat in summer will save up to 3 percent on cooling costs.

Consider the Alternatives

The principle is simple: It's a lot cheaper to move air around than it is to heat or cool it. With that in mind, consider these ways to stay cool in summer and warm in winter without depending entirely on your central system.

In the heat of the summer, use fans to circulate cooled air while you keep the thermostat at a higher setting.

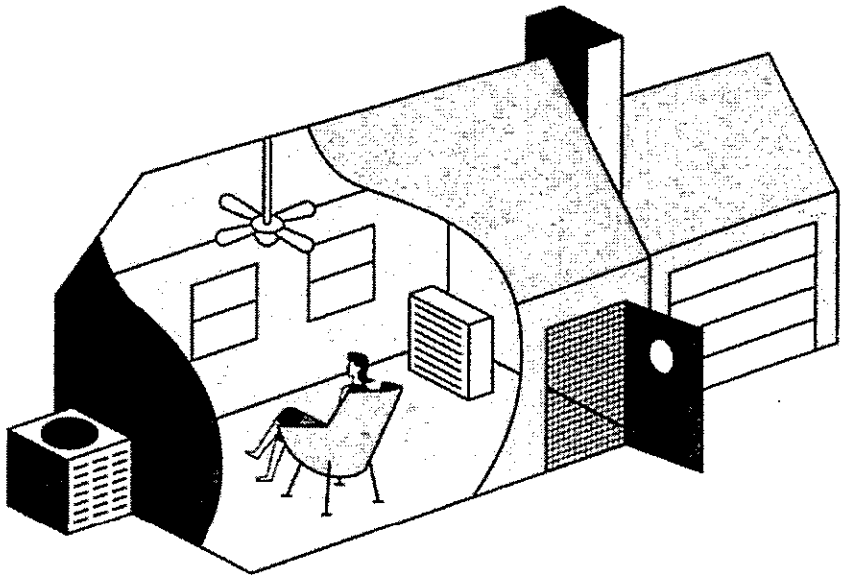
If you live in a part of the state with low humidity, consider an evaporative cooler as an alternative to central air conditioning. Evaporative coolers use water evaporation to cool the air and a fan to circulate it.



Programmable Thermostats

For maximum energy efficiency in heating or cooling, use a programmable thermostat to automatically adjust the setting when you leave the house or go to bed and then turn it back to normal when you return or wake up. Programmable thermostats range in cost from $45–$100+, but can easily pay for themselves in energy savings.

There are many options for heating and cooling your home. During temperate weather, consider leaving windows and doors open if you feel safe doing so. Use floor and ceiling fans to circulate air. For maximum cooling, use the central system supplemented by fans, and lower window shades to keep out the sun. For maximum heating, use the central system supplemented by fans, and open shades to take advantage of the sun's rays. ▶



In spring and fall, when it's not particularly hot or cold, a whole house fan can be an excellent alternative to your central system. Installed in the ceiling, a whole house fan draws outdoor air inside to cool the house.

Use pleated instead of mesh filters in your central air-and-heat system for better filtration.

Get Your Ducts in a Row

Are the air ducts in your home delivering all the warmth or cooling your system is generating–or are they losing it due to poor performance? Here's what you can do to make sure your ducts are working properly and delivering the conditioned air you're paying for.

Be sure your ducts aren't leaking. You or your service professional will be looking for:

- Obvious holes in the ducts.
- Dirty spots on the duct insulation and around air vents.
- Areas where connections have become separated.

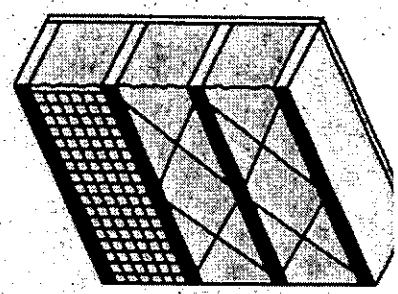
If you find only a few problem areas and you're a do-it-yourselfer, you can repair and seal them with duct tape. Just be sure to use tape with the Underwriters Laboratories (UL) logo on it to avoid tape degradation or cracking over time. However, if you find that your ductwork is very poorly insulated or has extensive leakage problems, call a service professional.

In winter, set your ceiling fan to turn clockwise to send warm air downward into the room. In summer, set it to turn counter-clockwise to circulate cool air through the room.

Attic Insulation

- Measure carefully to be sure you buy the correct amount of insulation.
- Get the right stuff. Choose batts or blankets to fit between joists, and use rolls or blankets on the attic floor.
- Install a vapor barrier of thick plastic sheeting if you choose insulation in the form of "faced" batts or blankets.
- Follow the product instructions and wear proper protective gear when installing insulation.
- Have attic vents installed along the ceiling cavity; this will ensure proper airflow from soffit to attic to control moisture and maintain the insulating power.

In a multi-story building, lightweigh fencing (left) or wire lacing (right) retains insulation between floors.



Home Improvements That Can Save You Plenty

Energy-related home improvements may not be as inexpensive as buying a fan or as simple as scheduling a system checkup, but they can be well worth the expense or time they require.

Save With a Heat Pump

Like standard systems, heat pumps can meet your heating and cooling needs in one unit. The difference is that a heat pump will heat for significantly less cost than a typical electric resistance-heating unit. There are two types of heat pumps available today.

- Air-source heat pumps draw heat from the air outside to heat your home in winter, and expel heat outside to cool your home in summer. An air-source heat pump may reduce your heating costs by up to 50 percent if you convert from an electric furnace to an all-electric air-source heat pump. Generally, the colder it gets where you are, the less the savings, since the colder the air outside, the more difficult it is to extract heat from it.
- Ground-source heat pumps (also known as geothermal or earth-energy systems) make use of the earth's ability to store natural heat. They pump heat from deep in the earth into your home rather than taking it from the air. A ground-source heat pump may cost more than a conventional system, but the energy savings could pay for the unit in three to five years.

Regular System Maintenance

Like any other mechanical device, a central heating and cooling system will only work well if it's regularly maintained. That means keeping the system properly "tuned" with regular professional checkups, frequent filter cleanings or replacements, and periodic observation of both the inside and outside units.

Be Good to the Planet and Your Pocketbook: Go Solar

Using passive solar energy to heat and cool your home can cut your heating costs by more than 50 percent and help reduce your cooling costs, too. If you're building a new home or doing a major renovation of your existing home, consider passive solar techniques such as:

- Placing larger, insulated windows on south-facing walls for more efficient heating.
- Improving heat transfer by locating thermal mass, such as a concrete slab floor or heat-absorbing wall, close to windows.
- Using reflective coatings on windows, exterior walls and roof to keep out heat in summer.
- Installing strategically designed overhangs to shade the house from summer sun.

Keep the Air Inside Where It Belongs

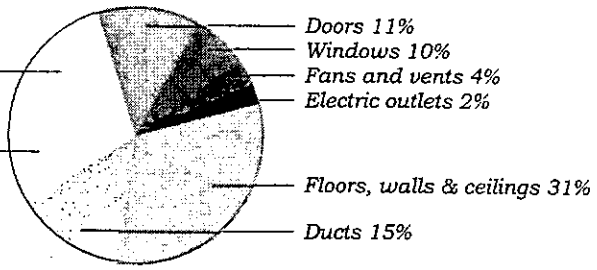
If your heating and cooling dollars are going out the window due to air leaks in your house, you need to caulk, weather-strip and insulate.

Caulking, or filling cracks and gaps in your home will eliminate air leakage around doors and windows as well as in areas where plumbing, ducting or electrical wiring penetrates the house. Weather-stripping is also useful around doors and windows that leak air.

Insulation creates a barrier of resistance to keep heat from escaping in winter or coming in during summer. The "R-factor" assigned to different types of insulation refers to the level of resistance. Different R-factor ratings are appropriate for different parts of the state, so check with your co-op and a local insulation dealer to see what's right for you.

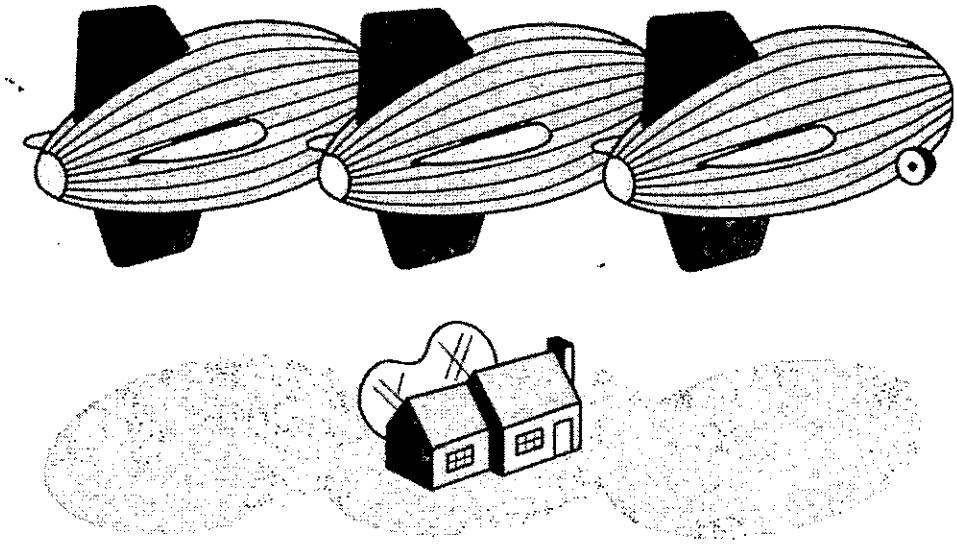
The best place to start insulating is the attic. That's because heat tends to rise and is therefore more likely to be lost or gained through the highest part of the house. The attic is also one of the easiest places to install insulation.

Where Does the Air Go?



Adapted from the U.S. Department of Energy's Energy Savers booklet, available at www.eere.energy.gov.

More than 600,000 cubic feet of air passes through the older Texas house daily. That's enough to fill three Goodyear blimps every 24 hours. ▶



Let the Sunshine In (But Only in Winter)

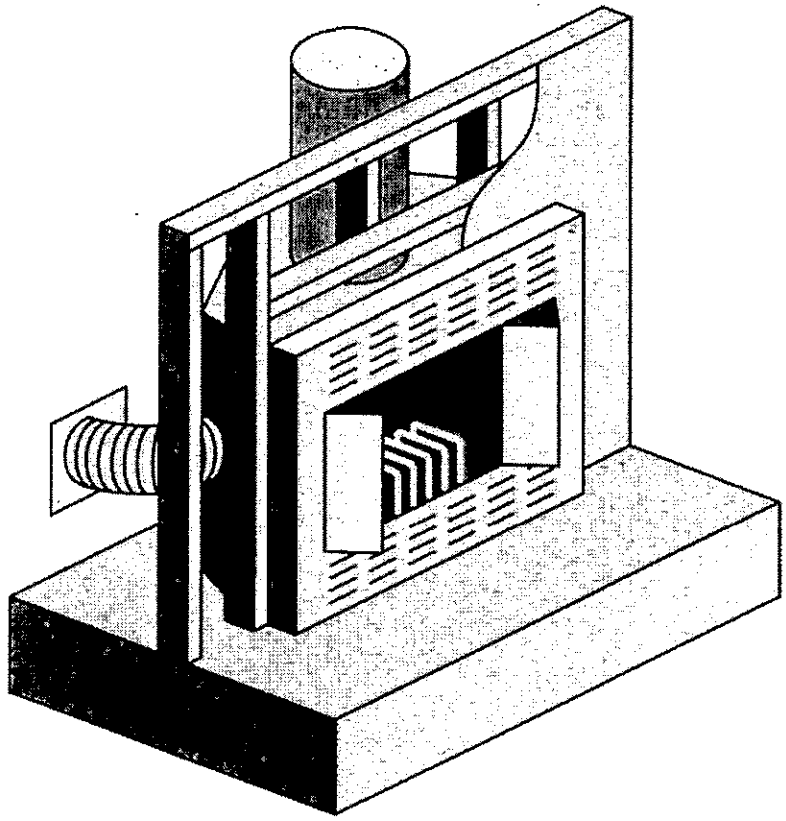
The U.S. Department of Energy estimates that one-fourth of the energy used to cool and heat your home is lost through windows.

Things you can do inside:

- Use lined draperies, opaque roller shades or special thermal shades on windows.
- Choose carpeting over fibrous padding for optimal heat gain or loss.
- Use fabric or woven wall coverings.

Things you can do outside your home to reduce energy loss:

- Consider installing storm windows and double-pane windows, which are at least twice as effective as single-pane windows.
- When you do spring planting, choose deciduous greenery for the south and west sides of your house that will leaf out and block the sun in summer–but lose its leaves and let in warming rays in winter.
- Consider the new solar panels that can absorb and dissipate up to 70 percent of the sun's heat and glare before it reaches the windows. They are easy to install and can be removed in winter.



Keep your fireplace damper closed unless a fire is going. Leaving the damper open is like throwing open a 48-inch window. The damper should be well sealed. It's best to cover the firebox opening with metal or glass doors, which will restrict the amount of heated air drawn from the house.

Keep the Home Fires Burning Efficiently

As much as 30 percent of your conditioned air could vanish right up the chimney. That's because a fireplace needs air to keep the fire burning–and it gets that air from inside your home, where you've already paid to make the air warm. Take these steps to improve fireplace efficiency:

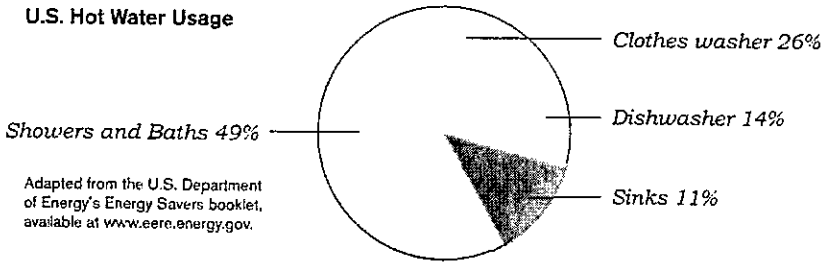
- Cover the firebox opening with tight-fitting metal or glass doors.
- Have a tight-fitting flue damper with an accessible handle; keep the damper open when the fireplace is in use and closed when it's not.
- Use a combustion air intake with a tight-fitting damper to draw air from outside into the firebox.
- Keep ash box clean, especially if outside, to provide air source.
- Use well-aged firewood, which burns hotter and cleaner.
- Caulk around the hearth.
- Plug and seal the chimney flues of unused fireplaces.

Stay Out of Hot Water

Water heating accounts for a sizable part of your energy bill–about 14 percent. Fortunately, there are a number of things you can do to ensure that you have plenty of hot water without wasting energy in the process.

Start by thinking of ways to use less hot water. Take showers instead of tub baths, for example. Or install low-flow showerheads and faucets. You can also reduce your energy consumption for water heating by turning down the water heater thermostat. (A setting of 120 degrees will provide a comfortable water temperature for most uses.) And you can insulate your hot-water storage tanks and pipes to reduce heat loss.

U.S. Hot Water Usage



Adapted from the U.S. Department of Energy's Energy Savers booklet, available at www.eere.energy.gov.

Heating and Cooling in a Nutshell

- Set the thermostat at 78 degrees in summer, 68 degrees in winter.
- Consider alternatives such as fans to take the load off your central system.
- Have your system serviced regularly for efficient operation.
- Clean or replace filters regularly.
- Keep ducts in good repair to avoid air leaks.
- Caulk, weather-strip and insulate.
- Install storm windows and double-pane windows.
- Landscape with plants that will block the sun in summer and let it in during winter.
- Choose window coverings, carpet and wall coverings with energy efficiency in mind.
- Take steps to minimize air loss through the fireplace.
- Lower the water heater thermostat to 120 degrees.

SEER: We Spell It Out for You

When buying a new central system or heat pump, check the unit's SEER (Seasonal Energy Efficiency Ratio) number. The higher the SEER, the more efficient the unit's performance

Appliances

The energy costs to operate everyday appliances such as refrigerators and freezers, ranges and ovens, washers and dryers, and dishwashers account for about 20 percent of your electric bill. You can reduce these costs by using appliances efficiently and by looking for high-efficiency choices when it's time to buy new ones.

Tips for Using Appliances Efficiently

Refrigerators and Freezers

Keep it clean. Regularly defrost models that aren't frost-free, and clean the condenser coils of your refrigerator three or four times a year.

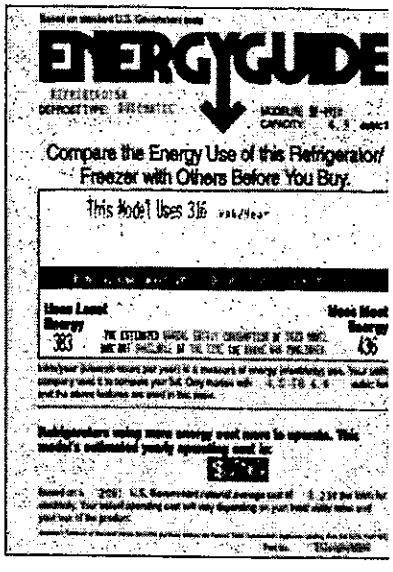
Shut the door. Don't stand in front of an open fridge contemplating the contents. Decide what you need before you open the refrigerator, then get what you need and shut the door.

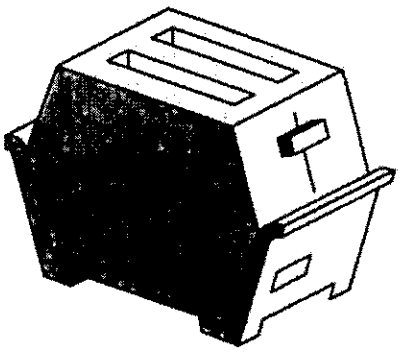
Fill the freezer. A freezer that's two-thirds to three-quarters full requires less energy to operate than an empty one. If you don't have enough food to fill the freezer, add some water-filled plastic milk cartons or soda bottles.

Test the seals. Fold a paper towel, shut the refrigerator door on it and then pull the towel out of the closed door. If there's no resistance, you probably need new seals around the door to keep the cold air in.

Maintain the right temperature. Optimum refrigerator temperature is 38 to 42 degrees. For the freezer, it's 0 degrees or higher (although not higher than the freezing point of 32 degrees, obviously).

Pay Attention to the EnergyGuide Label. It includes the estimated energy consumption in kWh on a scale with similar appliances and the estimated yearly operating cos based on the national average cos of electricity. ▼





How Much Are You Paying to Run Your Appliances?

To determine how much electricity an appliance uses, follow these steps:

1. Find the wattage of the appliance. (It's usually listed on the serial number plate.)
2. Estimate the hours per month that you use the appliance.
3. Multiply the wattage by the hours of use per month. Divide the result by 1,000 to get your total monthly kilowatt-hour (kWh) usage for the appliance.
4. Figure out your average monthly cost per kWh by dividing your total monthly electric bill by the number of kWh used. (kWh used will be listed on the bill.)
5. Determine your monthly energy cost for the appliance by multiplying the kWh usage by your cost per kWh.

Electric Ranges and Ovens

Keep it covered. Use pan lids to retain the heat in the pan. Remember that water boiled in a covered pan comes to a boil faster.

Use the right pan. Don't waste energy by using a pan or pot that is too small for the burner, or that is too large or heavy for the amount or type of food you are cooking.

Turn off burners sooner. Because electric burners stay hot for a while after they're turned off, you can turn the burners off several minutes before the allotted cooking time. The food will finish cooking without using more electricity.

Preheat selectively. Baked goods may require a preheated oven to come out just right, but other foods don't. There's no need to preheat when you're cooking a main dish or heating a casserole.

Use heat-conducting cookware. Ceramic, glass and stainless-steel cookware conduct and retain heat better, which means that you can reduce the oven temperature by 25 degrees when you use them.

Close the door. The oven loses about 25 degrees of heat every time you open the door. Use a timer to gauge doneness instead of opening the oven door every few minutes to check.

A toaster oven uses a third to half as much energy as a full-sized oven, which makes it a great choice for small meals and snacks.

Washers and Dryers

Don't run small loads. Wait until you have enough laundry for a full, large load.

Sort by wash temperature. Use hot water only for whites and hard-to-clean items. Wash everything else in warm or cold water to save on water heating costs.

Pretreat stains. The more you can do to remove stains and heavy soil before you wash, the less likely you'll have to wash an item a second time.

Shorten the wash cycle. Cutting washing time from 15 to 7 1/2 minutes will save about 25 percent of the electricity needed to run the washer.

Fill the dryer. Don't waste electricity by drying just one or two items.

Dry heavy items separately. Dry heavy items like towels in a separate load from lighter-weight items that don't need as much drying time.

Don't over dry. Use the cool-down cycle to allow clothes to finish drying with the residual heat in the dryer. If your dryer has a moisture sensor that automatically shuts off the machine when clothes are dry, use it.

Install a vent/filter kit. This will allow you to vent clean, warm air from your clothes dryer into your home during winter, recycling heat that would otherwise be wasted.

Use a clothesline. Anytime you can dry clothes outside instead of in the dryer, do. That's free solar energy!

Dishwashers

Run a full load. Don't run your dishwasher when there are only a few items in it.

Shorten the cycle. Keep the dishwashing cycle as short as possible. Don't use a long "pots and pans" cycle if you're only washing plates, glasses and silverware.

Air-dry dishes. Skip the drying cycle to reduce the amount of electricity needed to run the dishwasher.

It takes less water to wash a load of dishes in the dishwasher than to wash them by hand—approximately 9.9 gallons compared to an average of 15.7 gallons.

Buying New? Put Energy Efficiency First

There's plenty of consumer information available to you today to help you make the most energy-efficient choices when purchasing new appliances. (See sample EnergyGuide label on page 7.)

When buying a new freezer, choose a chest-style freezer instead of an upright model. Chest-style freezers retain cold air better when the door is opened.

Clean Up With the Right Laundry Temperature

Water Temperature	Electricity Saved
Hot wash/warm rinse	0%
Hot wash/cold rinse	33%
Warm wash/warm rinse	33%
Warm wash/cold rinse	67%
Cold wash/cold rinse	100%

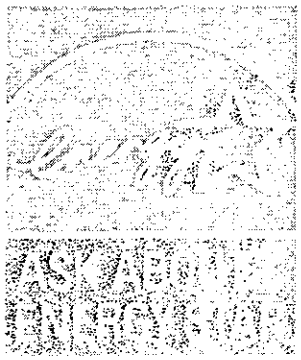
Front-loading washing machines use:

40 to 60% less water

30 to 50% less energy

50 to 70% less detergent

than top-loaders. ▶



Look for the Energy Star

Appliances that receive an Energy Star rating from the U.S. government are among the most efficient available today. They may cost more to purchase, but they will also cost less to operate over the time you own them.

- An Energy Star washing machine may use about a third of the energy and less water than other machines.
- Most Energy Star washers remove more water from your clothes during the spin cycle, so the clothes don't take as long to dry in the dryer.
- An Energy Star refrigerator can save $35-$70 a year compared to older models. That adds up to $525-$1,050 over the average 15-year life of the unit.
- Energy Star dishwashers use less water and energy, and must exceed minimum federal standards for energy efficiency by at least 25 percent.

Appliances in a Nutshell

- Consider lower-cost cooking alternatives such as toaster ovens and microwaves.
- Know how to read an EnergyGuide label.
- Look for the Energy Star to find highly energy-efficient new appliances.

Home Electronics

While individual energy consumption of home entertainment systems, computers and other home electronics may be relatively low, the cost can add up.

Unplug to Save

When you're away from home for the weekend or longer, don't just turn off your TV, DVD player and cable box. Unplug them. As long as these and other small electronics are plugged in, they'll draw power to operate timer displays and other functions that stay on even when the device is switched off. You won't save a fortune–from $.25-$3 a month per device–but every little bit counts.

Protect Against Power Surges

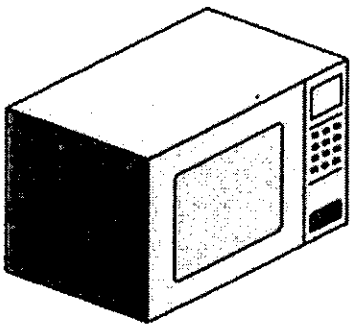
This simple step isn't about lowering your electric costs for home electronics. It's about avoiding the big hit you'll take if a power surge destroys your DVD player or other small electronics. Power surges are slight changes in voltage that happen during storms or other electrical events. They can damage the sensitive circuits inside electronic devices. To protect against them, plug your electronics into a surge protector.

Take Advantage of Built-In Computer Features

If you have a computer that runs on Microsoft Windows, use the power management controls to put your computer to sleep after it idles for a specified period (adjustable from five minutes to more than an hour). The hibernation mode reduces the amount of power the computer uses (up to 300 watts at full power) to 15 watts or lower. In addition, some of the newest computers available have a feature called IAPC (Instantly Available PC) that sends the computer into a sleep mode of less than 8 watts–and then allows it to go right back to where you left off instantaneously when you turn it back on.

Microwaving Makes Sense

Reduce your energy bills for cooking by using your microwave instead of your range or oven when you can. Microwave ovens use less energy than traditional appliances, and they don't heat up your kitchen.



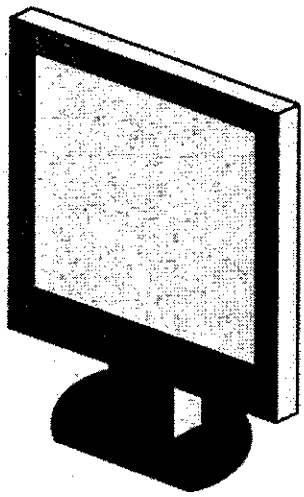
Don't confuse a power strip with a surge protector: A power strip offers no protection from power surges.

Home Electronics in a Nutshell

- When you're away for extended periods, unplug small electronics.
- Invest in a surge protector to keep power spikes from harming electronics.
- Take advantage of your computer's power management controls.
- Consider a flat-panel monitor for energy savings.

Gives New Meaning to "Flat Rate"

Been wanting a sleek, new flat-panel computer monitor–but worried about the high price? Does it help to know they use only about a third of the energy of a traditional monitor? You may pay more for one initially, but the savings over time are likely to make up for that.



Lighting

Go fluorescent. A 25-watt fluorescent light will generate as much light as a 100-watt incandescent bulb for one-fourth the energy. Fluorescent lights cost more to buy, but far less to operate. They last longer, too.

Turn out the lights. Don't waste energy by leaving lights on when you're not using them. Consider installing timers or sensors to reduce the amount of time your lights are on.

Use task lighting. Focus the light where you need it for reading, studying, sewing and other tasks, rather than just brightly lighting the entire room.

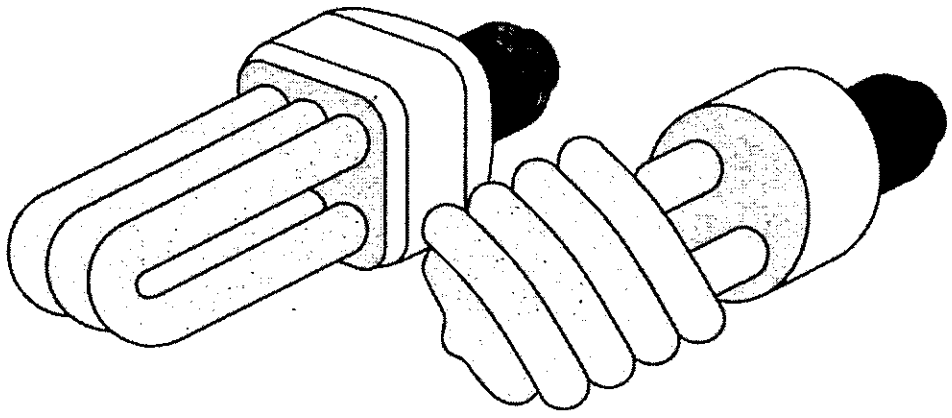
Avoid long-life incandescent bulbs. They are the least efficient of all incandescent light bulbs.

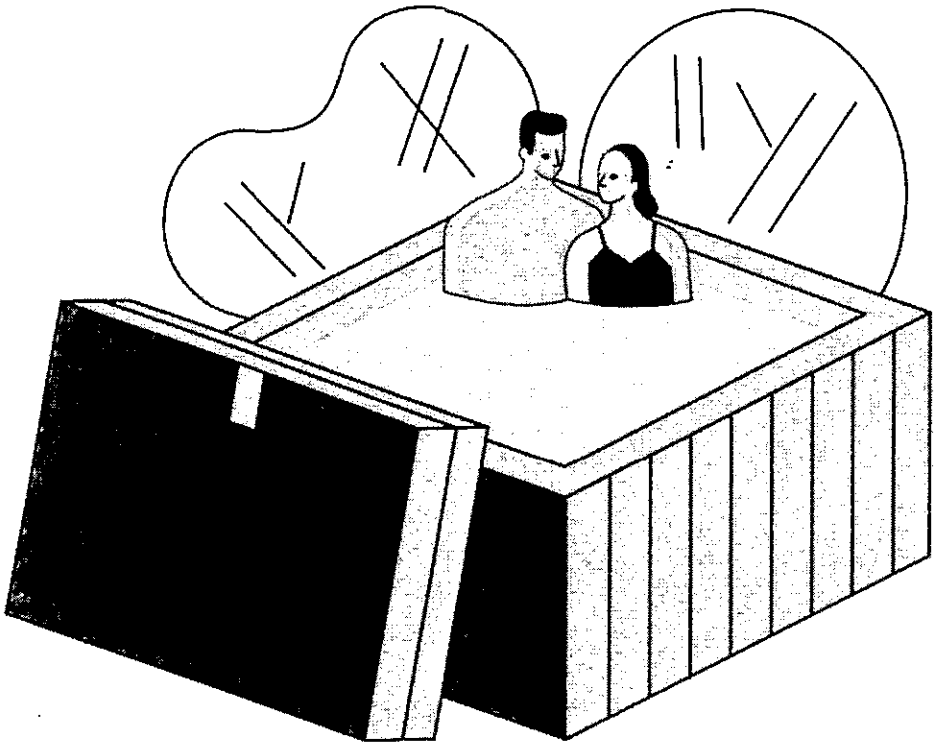
Buy fixtures with fewer bulbs. A 100-watt bulb glows with nearly 50 percent more light than four 25-watt bulbs.

Look for the Energy Star. Light bulbs and light fixtures are eligible for the Energy Star rating. Energy Star lighting uses two-thirds less energy and lasts six to 10 times longer than traditional lighting.

Replace 25 percent of the incandescent lighting in high-use areas with fluorescent lighting, and you'll save about 50 percent on the lighting portion of your electricity bill.

Fluorescent lighting is four times more efficient than incandescent lighting. ▶





Timers, covers, solar heating, lower temperature settings and insulation reduce the cost of using spas.

Pools and Spas

Relaxing in your pool or spa is even more enjoyable when you know it's not costing you a fortune to operate. A few simple steps can make a big difference in the energy cost to heat and circulate the water in your pool or spa.

Use a timer. A timer on the pool pump will make it easier to reduce the running time to only what it takes to keep the water clean and sanitary.

Keep it covered. Cover your spa with a tight-fitting, insulated cover when not in use.

Lower the temperature. Reduce the temperature or turn off the pool or spa heater between uses.

Consider solar heating. It's a much more affordable way to heat your pool than traditional electrical resistance heating.

Look for good insulation. When purchasing a new pool or spa, look for insulation that has been applied directly to the fiberglass or wood that holds the water. This type of insulation reduces heat loss and helps maintain water temperature.

Together, We Can Keep Energy Costs Under Control

Your electric cooperative is dedicated to delivering energy and energy solutions to you safely, dependably and at a reasonable cost. As a co-op member, you have the power to help keep that cost under control. When you use the information in this booklet to use energy efficiently in your home or business, you play an important part in reducing energy demands and controlling your co-op's energy costs. Thanks for taking the time to learn more about action you can take, and thanks for doing your part.

Resources

Air-Conditioning and Refrigeration Institute, **www.ari.org**

The Alliance to Save Energy, **www.ase.org**

American Architectural Manufacturers Association, **www.aamanet.org**

American Council for an Energy-Efficient Economy, **www.aceee.org**

American Society of Landscape Architects, **www.asla.org**

American Solar Energy Society, **www.ases.org**

Association of Home Appliance Manufacturers, **www.aham.org**

Cellulose Insulation Manufacturers Association, **www.cellulose.org**

Efficient Windows Collaborative, **www.efficientwindows.org**

Energy Star, **www.energystar.gov**

Federal Trade Commission, Bureau of Consumer Protection, **www.ftc.gov**

Insulation Contractors Association of America, **www.insulate.org**

National Arbor Day Foundation, **www.arborday.org**

National Association of Home Builders, **www.nahb.org**

National Association of State Energy Officials, **www.naseo.org**

National Insulation Association, **www.insulation.org**

North American Insulation Manufacturers Association, **www.naima.org**

Polyisocyanurate Insulation Manufacturers Association, **www.pima.org**

Rocky Mountain Institute, **www.rmi.org**

Solar Energy Industries Association, **www.seia.org**

Solar Rating and Certification Corporation, **www.solar-rating.org**

Texas Electric Cooperatives, **www.texas-ec.org**

U.S. Department of Energy's Energy Efficiency and Renewable Energy portal, **www.eere.energy.gov**

Window and Door Association, **www.wdma.org**

Newsletters

TOP 10 Energy-Saving Tips

1 TURN OUT THE LIGHTS. Like your parents always said, turn off the lights in unoccupied rooms. Replace your incandescent bulbs with equivalent compact fluorescent light bulbs (CFLs). CFLs last longer and use 75 percent less energy. LED-based lights are even more efficient.

2 USE A POWER STRIP WITH A TIMER. Plug appliances and electronics into a power strip on a timer so you can turn them all off at once. And, make sure those electronics and appliances are Energy Star-rated.

3 UPGRADE YOUR OLD REFRIGERATOR. A refrigerator purchased in 1975 uses four times more power than a new Energy Star-rated model.

4 SCHEDULE AN ENERGY AUDIT. Perform an online energy audit or have an energy auditor survey your home. Simple, inexpensive improvements often provide big savings.

5 BUY A SWEATER. Wear it and keep your thermostat set to a lower temperature. Every degree of temperature reduction can save 5 percent on heating costs. Consider purchasing a programmable thermostat to lower temperatures automatically while you are away from home.

6 REGULARLY CLEAN OR REPLACE THE HEATING/COOLING SYSTEM FILTER. Dirty filters reduce required air flow and make the equipment work harder. A clean filter can help save 5 percent in heating costs. The same is true for the lint trap on your clothes dryer.

7 TAKE A SHOWER. A quick shower using a low-flow showerhead will use only half the water required for a typical bath.

8 WRAP THAT WATER HEATER. You can save up to 10 percent of the energy required to operate an electric water heater by installing a tank insulating blanket (available at home improvement stores). Insulate the water pipes exiting your water heater to further reduce energy loss.

9 WASH CLOTHES IN COLD WATER. Up to 80 percent of the energy used by a washing machine is from heating the water it uses. Washing in cold or warm water saves energy. Consider the purchase of a front-loading model that uses half the water of a conventional top-loading washer. For drying, use a clothesline instead of a dryer.

10 SCALE BACK APPLIANCES. Using small appliances such as toaster ovens uses less energy than their larger counterparts. Only run dishwashers when there is a full load, and select the energy-saving cycle. 6011537601

Electric Cooperative Youth Tour

Enter to win an all-expense-paid-trip to our nation's capital.

High school sophomores, juniors and seniors from area schools are eligible to enter the 2011 Youth Tour to Washington D.C. contest, sponsored by Trinity Valley Electric Co-op.

Youth Tour 2011 is scheduled for June 9-17.

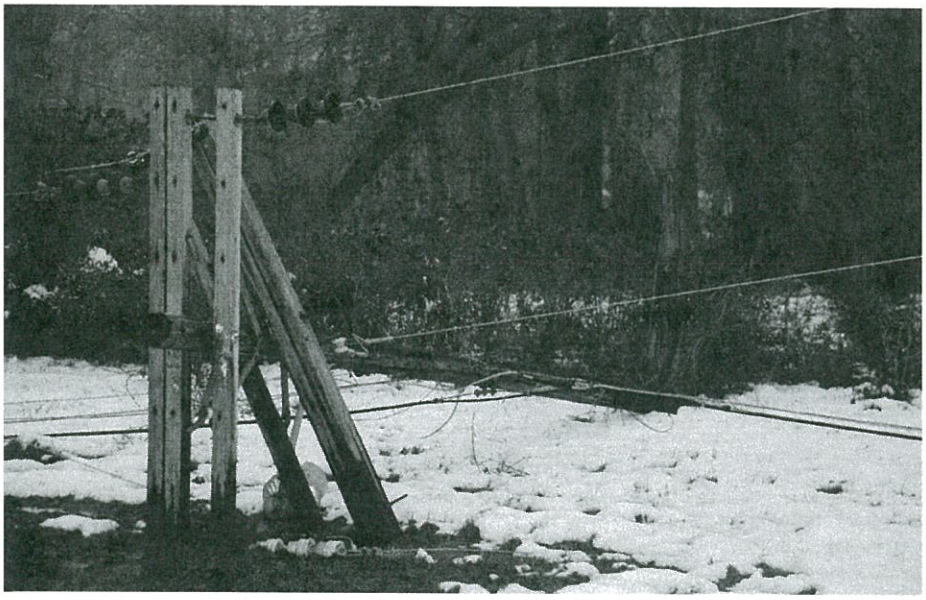
Applications and complete contest rules are available at tvec.net. Entries must be received by February 4, 2011. Contact Bobbi Byford at 469-376-2234 for more information.

Winter Storm Safety

Winter storms are an inevitable part of the winter season that can lead to downed power lines and outages. Remember the following tips to stay safe and warm should you find yourself in the dark after a severe winter event:

- Never touch a fallen power line and assume all wires on the ground are electrically charged. Call 911 or Trinity Valley Electric Cooperative at 1-800-766-9576 to report it immediately. Avoid contact with overhead lines during cleanup and other activities.
- In the event of an outage, an alternate heating source—such as a fireplace, propane space heater or wood stove—may be needed. Extreme caution should be taken.
- Plan to stay in an area of the home where the alternate heat source is located.
- Fuel and wood-burning heating sources should be vented. Be sure to follow manufacturer's directions.
- Make sure carbon monoxide detectors and smoke detectors are working properly.
- Do not use a gas-powered oven for heating. A gas oven may go out or burn inefficiently, leading to carbon monoxide poisoning.
- Do not use a gas or charcoal grill inside the home. Do not use charcoal briquettes in the fireplace.
- If you use a portable generator to power a heating source, be sure the generator is located outside your house for proper ventilation. Do not use a generator in an attached garage. Follow manufacturer's directions for operating the generator.
- Take special care not to overload a generator. Use appropriately sized extension cords to carry the electric load. Make sure the cords have a grounded, three-pronged plug and are in good condition.
- Never connect generators to home wiring. The reverse flow of electricity can electrocute an unsuspecting utility worker.

Ideally, your family will stay warm until the power comes back on. But keep an eye on family members for signs of hypothermia, which include shivering, drowsiness and mental and physical slowness. The elderly and young children are particularly vulnerable to hypothermia. Call 911 immediately if you notice these symptoms. At least one telephone in the house that does not depend on electricity should be available in the case of a power outage. 6014486301



White Walls Can Cut Need for More Lights

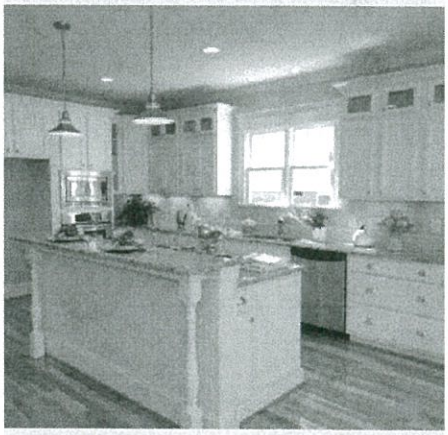
If you want to save energy in the kitchen, or any other room in your house, paint the walls white.

For example, an all-white kitchen, which includes white walls, cabinets, countertops and floors, requires only half of the lighting of a darker kitchen because light surfaces reflect light, while dark ones absorb it.

Two other ways to save energy on lighting your kitchen:

- Choose highly polished countertops. They act like mirrors to reflect light. A shiny granite countertop, for example, will bounce under-cabinet lighting back up, making a little bit of light more potent.

- Let the sun shine through kitchen windows by opening curtains during the day, by decorating with valances or café curtains instead of drapes that cover the whole window, or by removing the window treatments altogether if privacy isn't an issue. The more daylight you let into the room, the less often you'll need to flip on the light switch.



White walls and uncovered windows lighten the room.

Five Ways to Spring into Energy Efficiency

Spring marks a perfect time of year to make your home more energy efficient. Here are five quick tips that will save both energy and money:

Seal cracks and gaps around your home.

As part of your spring cleaning, consider adding weatherstripping around leaky doors and caulking around window frames. It's inexpensive and pretty easy to use a caulking gun to seal up leaks around vents, ductwork and windows.

A typical member of Trinity Valley Electric Cooperative can save more than $200 annually by taking these simple steps.

Let your A/C breathe.

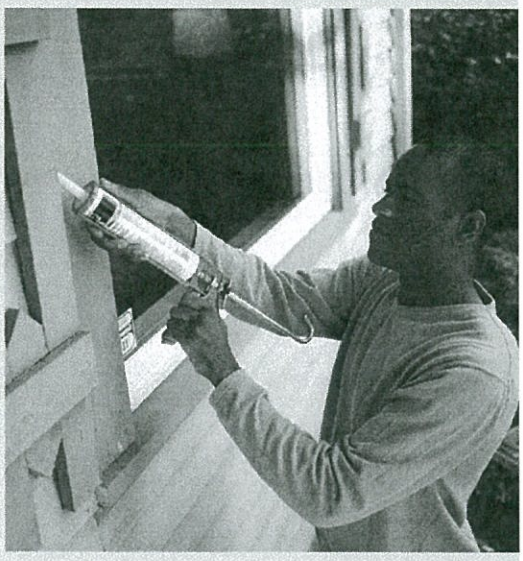
Change air-conditioner filters monthly. Dirty filters restrict air flow and reduce the overall efficiency of your heating and cooling system by making it work harder on hot summer days.

Clean the refrigerator.

Now's a good time to not only throw out that leftover fruitcake from the holidays, but also to check the temperature settings on your refrigerator. Ideally, a refrigerator's temperature should be between 37 and 40 degrees for maximum operating efficiency.

Also, as part of your spring routine, use a vacuum to clean accumulated dirt on the refrigerator's coils. The dirt interferes with efficient heat exchange and makes the fridge work harder than it needs to.

When it's time to replace that old refrigerator, be sure to buy one that has an Energy Star rating. These energy efficient appliances can save you as much as $100 a year.



Caulking around window frames is one of the most inexpensive steps you can take toward saving on your energy bill.

Think sunblock.

By pulling down the shades on your windows this spring and summer, especially the ones facing south and west, you could keep the heat out and save about $35 a year. Your local hardware store likely carries lots of inexpensive window coverings. Best of all, by blocking the sun, your house will stay cool and comfortable year-round.

Enjoy spring breezes.

Use a clothesline and let sunlight and breezes dry clothes naturally. This will reduce your electric bill and add a natural clean scent to your family's laundry. Sunlight acts as a natural disinfectant, killing bacteria that can leave a lingering smell in clothes.

Staying on Top of Unsafe Products

By Christine Smith

Each year, thousands of product recalls—many of them electrical devices—occur in the United States. Given that some recalls involve items that have done great harm, it's important to stay on top of developments.

Keep up with the dozens of recalls issued every week with these key sources:

Recalls.gov

The Consumer Product Safety Commission (CPSC), the National Highway Traffic Safety Administration, the Food and Drug Administration, the U.S. Department of Agriculture, the Coast Guard and the U.S. Environmental Protection Agency joined forces to create the website.

In addition to having the latest information, www.recalls.gov allows users to perform a keyword search through its archives and boasts a mobile phone application, which enables consumers to have information when and where they need it.

Some of the agencies, including the CPSC, have RSS feeds, which provide users with new information automatically every day.

ConsumerReports.org

The popular website www.consumerreports.org contains a safety blog on recalls and additional information including illustrations of unsafe products. Users can sign up for the safety blog to receive information on a daily basis.

Christine Smith writes about electrical safety for the National Rural Electric Cooperative Association.

Severe Weather ARE YOU READY?

Lightning strikes kill more Americans than tornadoes or hurricanes. Don't take chances with this deadly force of nature.

Lightning Safety Rules:

- Move to low ground.
- Avoid open fields.
- Do not seek shelter under a tree. Trees are easy targets for lightning.
- Whether at the beach or in a swimming pool, get out of the water immediately.
- Go inside a building and stay away from windows and doors.
- Stay away from metal objects.
- Avoid electric appliances and metal plumbing.
- Get off the phone.
- Do not touch metal objects, such as golf clubs or bicycles.
- Inside a car is relatively safe, but do not touch interior metal.
- If your hair stands on end, you may be a target. Crouch low on the balls of your feet and try not to touch the ground with your knees or hands.

Stay aware and play it safe during thunderstorms. Don't be a lightning rod.

Is Your House Ready for Spring?

Here are five items to add to your springtime to-do list that might help your home feel more comfortable and cared for before it gets hot:

1. Call a qualified service technician to inspect and maintain your air-conditioning system. Paying $100 or so now could prevent a huge expense this summer. Maintenance goes a long way toward preventing emergencies and can prolong the life of your equipment.

2. While you're outdoors planting and pruning, trim all of the bushes and pull all of the weeds near your air conditioner's outside condenser unit. Remove any fallen tree limbs that landed on it, brush off leaves that have collected on or around it, and pick up trash that has found its way there as it sat unused all winter. Anything that touches the unit and prevents air from circulating around it will make it perform inefficiently.

3. While you've got your shovel and spade out, consider planting some shade trees on the sunny side of your house. As they grow, they will filter the sun's rays that can beat so fiercely on your windows in the summer and make your air conditioner work harder.

4. Speaking of windows, if your house still has single-pane versions, this is a good time to replace them with double-pane models. Single-pane windows are energy inefficient and can drive your air-conditioning bills through the roof.

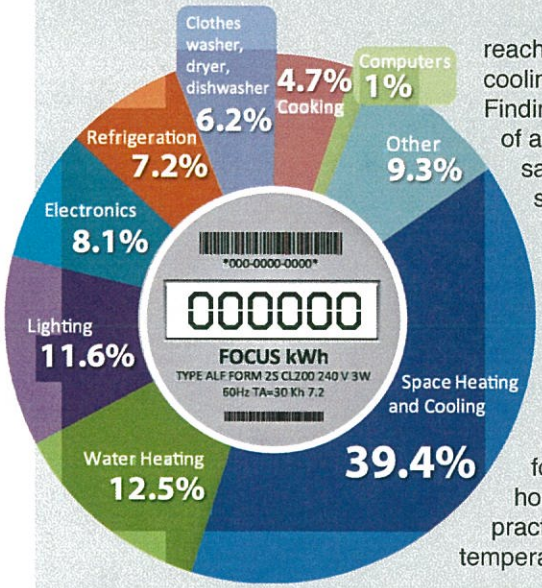
5. Clean your windows, inside and out. Newer models are simple to clean because you can tilt them toward the inside of the house so you can reach both sides. Clean windows let more sunlight into your house, which means you won't have to turn on as many lights.

TRIM THE FAT
from Your Biggest Electrical Expense

Knowing which household activities consume the most electricity can help homeowners determine where they can save on electric bills.

Regulating temperature inside the home uses the most electricity. Almost 40 percent of the electric bill for an all-electric home covers the cost of cooling and space heating, according to U.S. Department of Energy data.

HOW YOUR HOME USES ELECTRICITY



As Texas approaches hot-weather months—when temperatures outside can reach triple digits—having an effective cooling system becomes crucial. Finding ways to increase the efficiency of an air conditioner can create a cost savings on electric bills during the summer.

To make the best use of an air conditioner, it helps to know two basic principles about how most units work: Air conditioners (1) decrease humidity; and (2) lower air temperature.

Decreasing humidity inside and increasing a unit's capacity for cooling can help keep your home comfortable. Here are some practical methods to keep humidity and temperatures down:

HUMIDITY

- Close doors and windows to prevent humid outside air from coming in.
- Vent dryer exhaust to the outside.
- Fix plumbing leaks.
- Move houseplants with wet soil and moisture-producing leaves outside.
- Prepare meals without boiling liquids or use the exhaust fan.
- Consider investing in an energy-efficient dehumidifier.

TEMPERATURE

- Set thermostat no lower than 78 degrees.
- Clean indoor and outdoor coils of the air conditioner.
- Change air-conditioner filters.
- Block light from entering through windows with shade trees or blinds .
- Consider buying a programmable thermostat. For an overview of programmable thermostats, visit www.consumerreports.org.
- Use ceiling fans to bring the temperature down by about 4 degrees.

Source: 2009 Buildings Energy Data Book, U.S. Department of Energy, Table 21.5. Represents an all-electric home. Updated February 2011.

SAVING ENERGY IN CHURCH

Because many houses of worship rely on small or nonexistent budgets for capital projects, low- or no-cost measures that reduce energy consumption generally produce the best results. Some simple steps involve changing the way congregants and staff use the building.

Here are some suggestions for cost-effective efficiency improvements in a church:

- Turn off the lights when not in use. While occupancy sensors can be cost-effective, posting reminders to ensure the lights are turned off often does the trick.
- Replace incandescent lightbulbs with compact-fluorescent lightbulbs.
- Control "plug loads," such as microwaves, computers and televisions that continue to draw power even when turned off. Unplug these appliances when finished using.
- Heat and cool during occupied hours only.
- Lower the temperature setting on water-heater thermostats.
- Change air-system filters on a monthly basis—more often if the congregation is located next to a highway or construction site.
- Close air registers in any unused rooms to direct conditioned air where it is needed. If some rooms overheat while others are too cool, call a qualified heating-and-cooling contractor.
- Use caulk and weatherstripping to seal gaps around windows, doors, chimneys and other structural elements, including the foundation.
- Insulate hot water pipes and fix leaky faucets, showerheads, pipes and toilets. 6012638402

Going On Vacation?

Give Your Electric Meter a Break, Too

In 2011, Americans are expected to spend $683 billion on travel, according to the U.S. Travel Association. If you're heading out on a summer trip or weekend getaway, save a few dollars by leaving your home in an energy-efficient state. From lighting to air conditioning, turning electronic equipment off or down can save energy and money.

Air conditioners don't need to run full tilt while the home is vacant. Consider turning the air-conditioning unit off to maximize savings, or at least adjusting the thermostat to save money on what could be your largest single energy expense.

Electronics with digital displays and standby power settings, such as digital clocks, TVs, DVD players, stereos and coffeemakers, should be unplugged to prevent phantom energy use, drawing electricity even when not switched on.

Fountains, hot tubs and other outdoor waterworks that use electricity can be turned off.

Lights can be switched off. If planning to use timers or motion-detecting lights to create the illusion of being at home, use energy-efficient lightbulbs in the fixtures set to light up.

Outbuildings, such as garages, shops, sheds and studios, should be checked for lights left on and appliances that can be unplugged.

Refrigerators can be made more energy-efficient by adjusting the temperature to make them slightly warmer. Food left in the fridge will likely stay preserved at 38 degrees.

Also, filling empty spaces with nonperishable beverages or containers filled with water helps keep the temperature consistent. If vacationing for a long period of time, completely empty the refrigerator and freezer, and unplug them to maximize savings.

Water heaters can be turned off to save electricity. Writing down the temperature setting can help you remember where to set it (120 degrees is an ideal temperature) when you turn it back on.

Windows let in light, which creates excess heat. Close blinds and curtains to moderate the temperature.

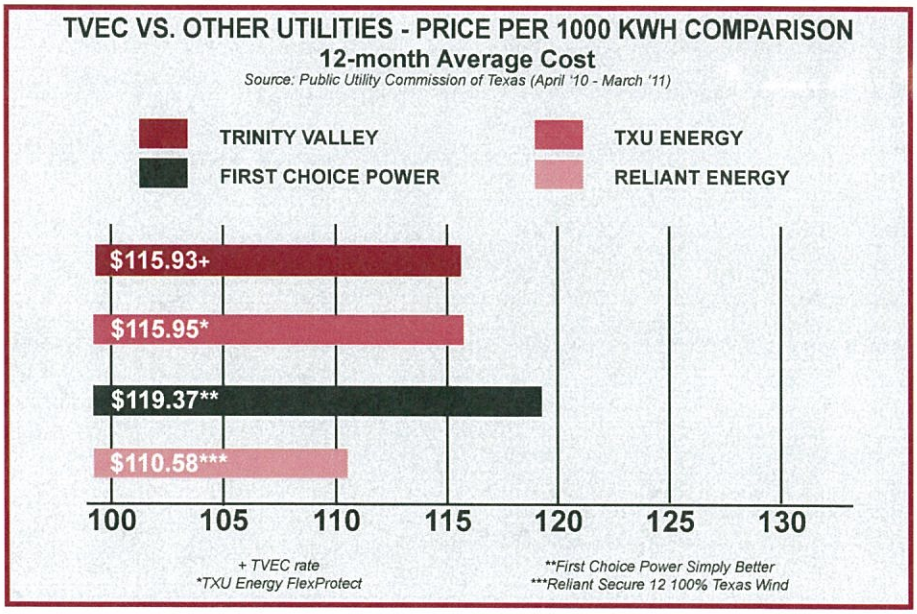
Read the electric meter before and after a vacation to see how much energy was saved. Then use the savings on your next vacation.

WIN $25 JUST FOR READING

Somewhere, hidden in this newsletter, is a TVEC account number. Read closely, if the account number is yours, contact the Member Services Department by July 15, 2011 to receive a $25 credit on your electric bill. Don't miss out – you could be a winner.

Home Energy Audits Available

As a special service to our members, TVEC offers free home energy audits. Upon request, trained TVEC personnel will visit your home and offer advice on ways you can improve the management of your energy usage. If you are interested in this valuable service, call our office today for an appointment. We will be happy to explain the details.



TVEC TRINITY VALLEY ELECTRIC News
A Touchstone Energy® Cooperative
July 2011 www.tvec.net Vol.23 • No.7

Capturing the Wind

Message from Manager of Engineering
Tim Craig

The concept of harnessing the wind to do work is nothing new in this part of the country. For decades, farmers and ranchers have used windmills to pump underground water to the surface. The wind power you might see these days is used to power motors that generate electricity.

Some of you might be thinking about putting up your own wind generation unit. After all, the wind is a free source of power—all you have to do is put up a generator and start making your own electricity, right? Well, it's not that simple.

It's advisable before installing any wind generation to research many factors and consider expenses that might not be readily apparent. If your aim is to use a wind generator to save or make money, you might find that goal difficult to attain.

Installation of a wind generation system that is tied into the electric grid can affect the safety and reliability of the co-op's distribution system and the quality of power received by neighboring consumers, according to a report by the Cooperative Research Network, a service of the National Rural Electric Cooperative Association.

That's why we strongly recommend you talk to Trinity Valley Electric Cooperative before purchasing a wind generator. We can help you understand the technical requirements for connecting to the electric grid and also help you figure out if it will be a smart investment for your household.

There are several factors to consider before buying a wind power system: How much power do you use? How much money do you have to invest? How long do you expect to use the system? What are the maintenance costs? How reliable are the winds where you want to put the generator? How reliable is the particular model of generator you want to buy?

You also need to consider your location. In more densely settled areas, zoning laws may prohibit the construction of a wind turbine.

But in any location, you must know just how much wind you have, day after day. In these calculations, average wind speed becomes critical. The best way to determine that speed is to gather measurements at the height your generator is to be situated. That's because the wind speed at 50 to 100 feet above the ground, the height of small wind generators, is different than the wind speed at ground level. And the wind blows at different speeds and directions at different times of the year, or even different times of the day.

These factors and more are why paying back the cost of installing a wind turbine, which can run into the thousands of dollars, can take several years to several decades.

Remember, even though the wind may be free, the cost of harnessing it can be considerable. Please talk to the professionals at Trinity Valley Electric before making a deal to buy a wind power system.

RAISE THE TEMPERATURE A LITTLE SAVE A LOT

The U.S. Department of Energy says you can save 10 percent a year on your heating and cooling bills by simply setting your thermostat 10 degrees higher in summer or lower in winter—for eight hours. You can do this automatically without sacrificing comfort by installing a programmable thermostat.

But cranking your thermostat way up whenever you leave the house won't necessarily reduce your air conditioning bill.

Here's what doesn't work:

1. Changing the thermostat setting for short periods several times a day. If you'll be gone for less than six hours, leave your thermostat where it is.
2. Lowering the thermostat to 60 degrees when you get home to kick the unit into high gear and cool the home quicker. That doesn't cool your home off any faster, but it will use more energy than if you set the thermostat to a reasonable temperature.

Your best bet: Set it and forget it. If you replace your old thermostat with a programmable model, you can set various schedules for work and sleep on weekdays and weekends—and let the thermostat "remember" when to change for the most efficient—and comfortable—result.

A caution: Don't use a regular programmable thermostat with a heat pump.

Keep CFLs Burning Bright

The upfront cost of switching your incandescent lightbulbs to long-burning, compact fluorescent lamps might not be cheap, but you'll save money in the long run by replacing the bulbs less often and by using less electricity to burn them.

So if you've noticed that your CFLs are burning out too soon, it could be that you're buying the wrong kind.

Normal CFLs aren't designed for use with dimmers. And they don't last as long if you use them in enclosed areas or where there's excessive heat, vibration or fluctuations in power.

Some tips:

• Before you buy a lightbulb for a dimmer or another special use, check its label to see if it's made for that purpose. Some CFLs work in dimmers, motion sensors or three-way sockets, for example. But not all of them do.

• Buy the right-sized lightbulb for the fixture. Using a larger lightbulb or one that burns brighter than recommended for a lamp or ceiling fixture can cause the bulb to overheat and burn out prematurely.

• Avoid placing CFLs in enclosed indoor fixtures. The lack of air circulation and increased heat can reduce the bulb's life.

• Choose a special, more durable CFL for use in an overhead fan light, which can vibrate and disturb the bulb.

• If you're using CFLs outdoors, find bulbs designed for exterior use, and check the package to learn if the bulbs can withstand cold temperatures. Place them in protected fixtures.

• Turning a CFL on and off frequently can shorten its life. Try to leave it on for at least 15 minutes at a time.

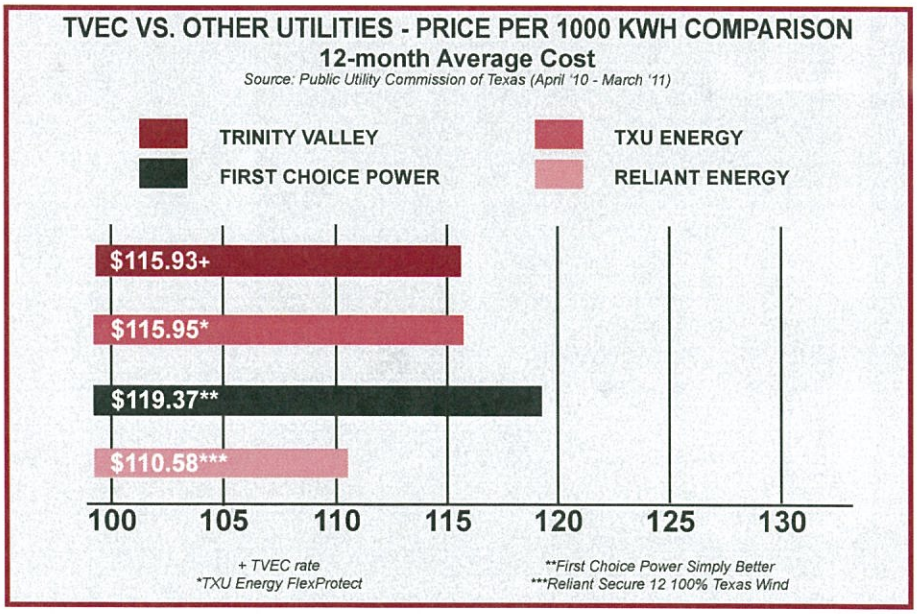
With normal use, CFLs typically last for 10,000 hours—13 times longer than an incandescent bulb.

WIN $25 JUST FOR READING

Somewhere, hidden in this newsletter, is a TVEC account number. Read closely, if the account number is yours, contact the Member Services Department by August 15, 2011 to receive a $25 credit on your electric bill. Don't miss out – you could be a winner.

Home Energy Audits Available

As a special service to our members, TVEC offers free home energy audits. Upon request, trained TVEC personnel will visit your home and offer advice on ways you can improve the management of your energy usage. If you are interested in this valuable service, call our office today for an appointment. We will be happy to explain the details.



TVEC News
TRINITY VALLEY ELECTRIC COOPERATIVE
A Touchstone Energy® Cooperative
August 2011 www.tvec.net Vol.23 • No.8

Electric Bill Savings—Now and in the Future

Message from General Manager/ CEO
Jerry Boze

When you're on a road trip, chances are your vehicle gets better gas mileage when you drive at a steady speed. Stomping on the accelerator burns gas more quickly than traveling at a measured pace. And if you do race down the road and happen to run out of gasoline, you might be forced to refill at a station with the higher price.

The cost of electricity is partly controlled by consumers. Conserving energy remains the best way to reduce your electric bill—now and in the future.

But saving electricity does not mean you have to stop using your lights, air conditioners, TVs and washer machines. Members can reduce their electricity consumption by changing a few habits and taking advantage of energy-efficiency options.

One of the best ways to find out how you can more wisely use electricity in your home is to schedule a free home energy audit to be performed by trained TVEC representatives. Results of an energy audit's examination of your home's airtightness, insulation and the household's energy-use behavior could reveal some cost-effective ways you could save money on your electric bill.

If you elect to use an energy auditing firm, be sure to check the company's references and inquire about any complaints with the Better Business Bureau. Also, you should stay with the auditor while he or she examines your home so you can learn or be available to answer questions.

If you are a do-it-yourselfer, you can perform your own home-energy assessment. The U.S. Department of Energy provides details on how to conduct your own energy audit at www.energysavers.gov/your_home/energy_audits, including a description of how to do a basic building pressurization test to find air leaks. This thorough walk-through of your home to check for air leaks, proper insulation, energy-efficient lighting, and up-to-date cooling and heating systems could give you ideas for how to save money on your electric bill.

Another good resource is www.hes.lbl.gov/consumer/, which allows you to input information specific to your home and then provides suggestions for savings.

To find even more ways to cut back on your energy bill, check out togetherwesave.com.

TVEC's website, www.tvec.net, also provides practical solutions that can make a big difference in your electric bill—now and in the future.

Co-op Teens Take In DC

TVEC again sponsored two teens from the co-op service area for the annual Youth Tour to Washington, D.C. Blane Skiles, of Mabank and Kaitlin Samples, of Murchison were among the over 1,500 high school students from across the country who participated in the event held June 9-17 in Washington, D.C.

Each year in June, an action-filled week provides high school students opportunities to learn first-hand what it is like to be involved in politics, community service and today's pressing issues.

Highlights included meeting with their elected representatives in the U.S. House and Senate to discuss the process of government and issues of the day and increasing their knowledge of electric cooperatives and American history.

The Youth Tour has been a joint effort of local electric co-ops, such as TVEC, their statewide co-op associations, and the National Rural Electric Cooperative Association for over 40 years.

Kaitlin Samples and **Blane Skiles**

Efficiency Upgrades That Make Sense

By Brian Sloboda

Surveys show that only about 15 percent of folks actually take steps to enhance the energy efficiency of their home. In most cases, people think energy-efficiency improvements are too complicated or expensive to tackle.

However, there are several simple upgrades you can consider that won't break your household budget.

LIGHTING

Compact fluorescent lightbulbs (CFLs) may look odd, but one CFL uses about 75 percent less energy than a traditional incandescent lightbulb. That can save more than $40 over its lifetime, according to estimates by the U.S. Environmental Protection Agency's Energy Star program. Early CFLs had some issues with color or quality of the light, but with today's versions, you probably won't notice a difference using a CFL.

HEATING AND AIR CONDITIONING

The U.S. Energy Information Administration estimates that heating and air conditioning account for 39 percent of a typical home's annual electric bill. While an air-source heat pump or a geothermal heat pump can be 20 percent to 45 percent more efficient than an existing central heating and cooling system, up-front installation costs are often a barrier.

Simple solutions such as changing air filters at least every month will increase airflow to rooms, increase the lifespan of your central-heating and cooling unit and improve air quality. Sealing and insulating ductwork can be done in a weekend and result in energy savings of up to 20 percent.

To lessen the amount of work that heating and cooling systems need to do, it's important to find and fix air leaks. Walk around your house on a windy day and feel for drafts around exterior doors and windows, electric outlets and entrance points for TV and telephone cables. Fix leaks with caulk, spray foam or weatherstripping.

Simple acts such as cooking outdoors on a hot summer day and closing curtains to block the summer sun will keep the interior of your home cooler.

APPLIANCES AND ELECTRONICS

Gadgets and equipment that make life easier are also some of the largest electric users in our homes. When buying a new appliance, look for the Energy Star label.

To keep appliances running more efficiently, try these tips:

- Replace worn refrigerator door gaskets to stop cool air from seeping out.
- Clean lint traps on dryers and don't overdry clothes.
- Clean refrigerator coils and keep refrigerators away from heat-generating appliances such as an oven.

Many home electronics, like computers, TVs and DVD players, consume power even when turned off. Called "vampire" or "phantom" load, the average home loses 5 to 15 percent of its monthly energy consumption to these devices, according to the U.S. Department of Energy (DOE). In fact, the DOE reports a full 75 percent of the power used to run home electronics is consumed when they're turned off. Plugging these items into a power or smart strip and turning off the strip when not in use is a simple way to stop this loss of energy.

Brian Sloboda is a program manager for the Cooperative Research Network, a service of the National Rural Electric Cooperative Association.

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Barker, Lathem, Robison Compete in Lineman's Rodeo, Take Third in Division

For the third consecutive year, TVEC Lineman Josh Lathem took top honors in the pole climb event at the Texas Lineman's Rodeo. Lathem's time of 18.25 seconds was better than the 63 other competitors and just shy of the event record.

"I've done it in 15 seconds during practice," said Lathem. "I almost had the record, but I had a slight miscue when I got to the top of the pole."

By winning this year, Lathem became the only competitor ever to win three years in a row. He has never finished worse than second in the event since he began competing as a Journeyman Lineman.

Lathem's effort along with that of Lineman Lance Robison was enough to earn first place team honors in the pole climb.

TVEC's team, which also included Eric Barker, took home the third place overall award in the cooperative division.

The Texas Lineman's Rodeo is held each summer in Seguin. Linemen from across the state compete in a variety of events designed to showcase their skill and efficiency in performing their day-to-day duties.

To see more photos from the 2011 Texas Lineman's Rodeo, visit www.tvec.net.

(from left) **Eric Barker**, **Josh Lathem** and **Lance Robison** show off the trophies they won at the Lineman Rodeo.

Electric Bills Reflect Weather Patterns

Minimizing movement of conditioned air can cut costs

By Kris Wendtland

Electric bills vary with the seasons, driven by weather and consumer use patterns.

"Weather matters," stresses Chad Reisenauer, key accounts/energy conservation coordinator at Basin Electric Power Cooperative, a generation and transmission cooperative headquartered in Bismarck, N.D. "When it's cool outdoors, family members generally want the house warm. When it's warm outside, air conditioners make living areas pleasant."

How much weather affects your electric bills depends on many factors, including your home's original construction materials, insulation, and air leaks. Personal comfort plays a role too, as does the difference between the thermostat setting inside and temperatures outdoors.

"When a house stays at 68 degrees Fahrenheit, but the outdoor temperature varies from minus 20 degrees in winter to more than 100 degrees on a muggy summer's day, demand for heating and cooling can be significant," Reisenauer notes. "Cooled air leaving a home essentially wastes the money spent to cool it. The same is true for air a homeowner has paid to warm."

R-value offers a way of measuring insulation's effectiveness (a higher R-value indicates more effective insulation). For example, on a 28-degree day, heat loss from a residence set at 68 degrees could hit 2,464 Btu per hour even through an 80 ft. x 10 ft. exterior wall packed with R-13 insulation. Reverse that situation on a scorching day—100 degrees outside—and heat gain indoors will still reach 2,464 BTU per hour.

To save money, set your thermostat five degrees closer (higher in summer, lower in winter) to the outdoor temperature—this simple change could result in a savings of 90 watts per hour of electricity—about 197 kilowatt-hours (kWh) in three months. At a national average of 10 cents per kWh, this adjustment keeps an extra $19.70 in your pocket.

Contact TVEC to schedule an energy audit, free of charge. Specialists who perform these audits can help save you money by uncovering energy waste and making recommendations to improve energy efficiency.

In the meantime, adjust the thermostat. Keep blinds and drapes on the sunny side of your home closed in summer and open in winter. Find mysteriously "hot" or "cold" spots in the house and solve them by installing gasket seals around outlets and weather stripping along doors and windows, replacing old windows, and upgrading insulation. When practical, adjust landscaping to provide shade for your property in summer and sunlight in winter.

Weather doesn't have to play havoc with electricity bills. "There are a variety of tools, appliances, and resources available to solve all sorts of energy challenges," Reisenauer stresses. "Some, such as new windows or a roof, require significant financing. But there are a lot of options that are inexpensive and simple to benefit from."

Find more ways to save at www.tvec.net and www.TogetherWeSave.com.

Sources: Jim Herritage, CEM, Energy Auditors, Inc.; Residential Energy: Cost Savings and Comfort for Existing Buildings by John Krigger and Chris Dorsi.

Kris Wendtland writes on energy efficiency issues for the National Rural Electric Cooperative Association.

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Winter Safety

SPACE HEATERS should be used sparingly and safely, always following the manufacturer's operating recommendations and keeping them several feet away from all objects. Heaters may require cleaning every so often. This can be done by first unplugging the heater and simply vacuuming to remove dust. Do not dismantle the heater for cleaning.

ELECTRIC BLANKETS should be checked for damage before they are used. Look for kinks, worn wires, scorch marks or breaks in the heating element. Remember, electric blankets have a limited life, and if there is any doubt about their safety, throw them out and replace them.

DON'T TANGLE WITH TINGLES—if you receive electric shocks or tingles from an appliance turn it off, unplug it, do not use it and discard it or get it checked out immediately.

SMOKE DETECTORS and carbon monoxide detectors should be tested to make sure they are working properly.

SURGE PROTECTORS should be used for all valuable electronics. And, if the holidays brought additional computers, TVs and other electrical devices into your home, be sure not to overload electrical circuits.

Debunking Energy Myths

By Todd Camnitz

Interested in saving energy to lower your electric bill, but confused about new technology and information available to help you do so? Separate fact from fiction with the following energy-saving myths.

Myth #1: It takes less energy to have my thermostat maintain a comfortable temperature while I'm away than it does to have it heat up or cool down my house when I get home.

If you're going to be gone for more than a few hours, then it is more cost-effective to turn heat or air conditioning on once you return than it is to maintain a comfortable temperature while you're out.

ENERGY STAR, a joint program of the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy, recommends adjusting your thermostat up in the summer and down in the winter by 8 degrees Fahrenheit while you're asleep or away from your house.

Myth #2: I can save money simply by installing a programmable thermostat.

On their own, programmable thermostats do not make your heating or cooling system more efficient. Their money-saving value lies in their ability to, once properly programmed, automatically regulate the temperature inside your house to coincide with when you're there and when you're not. If you need help programming your thermostat, directions are usually available from the manufacturer's website.

Myth #3: When I turn off electronics (like my TV, game console, or computer) they stop drawing power from the outlet.

Even when turned off, most modern electronics consume a small amount of electricity if they're still plugged in. Chargers for mobile devices also consume electricity if plugged in, even when they are not actively charging the device. This wasted energy, called "phantom load," accounts for as much as 10 percent of a home's total electric use, according to the Lawrence Berkeley National Laboratory. The solution: unplug your electronics when you've finished using them. Using a power strip can help you conveniently unplug multiple devices at once, while newer, "smart" power strips can automatically cut off phantom loads on their own.

Myth #4: Compact fluorescent lightbulbs (CFLs) take forever to reach full brilliance, have inadequate light quality or unpleasant color, and make no difference on my utility bill.

As with many products, CFLs vary in quality. Color and brightness differ across manufacturers, and some bulbs simply work better than others. Looking for the ENERGY STAR symbol ensures that you're purchasing a high-quality product. Also, be sure to install CFLs in fixtures that remain on for long periods, or that you use often, to get the maximum energy savings out of your bulbs. In addition, specialty CFLs are available for applications such as spotlighting or bathroom vanity fixtures.

Myth #5: It is not worth my time or money to seal small air leaks around my windows and doors, or to make sure my home is adequately insulated.

According to ENERGY STAR, air leaks around cracks and gaps throughout your home become the equivalent of leaving a window open all year long. Typical homeowners can save up to 10 percent on their total annual energy bill by sealing and insulating their home.

Todd Camnitz writes on energy efficiency issues for E Source, a Colorado-based provider of energy business intelligence. For more information, please visit www.esource.com.

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WIN $25 JUST FOR READING

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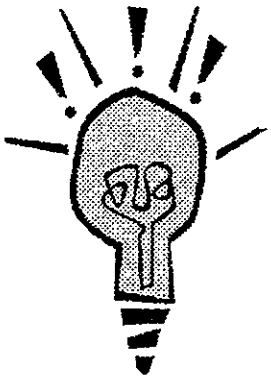
Home Energy Audits Available

As a special service to our members, TVEC offers free home energy audits. Upon request, trained TVEC personnel will visit your home and offer advice on ways you can improve the management of your energy usage. If you are interested in this valuable service, call our office today for an appointment. We will be happy to explain the details.

Brochures

Brochures are displayed in the lobbies of all four TVEC office locations

LIGHTING and HEATING AND COOLING

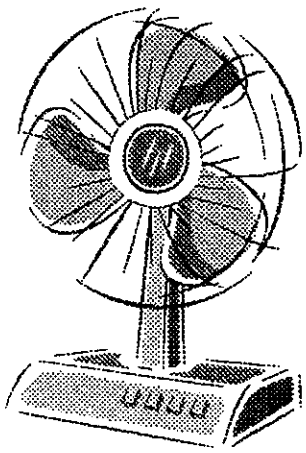


LIGHTING

- By replacing incandescent lights with fluorescent lights nearly four times as much light per watt can be produced and last 9 to 12 times as long.
- Keep light fixtures clean. Dust can absorb up to 20 percent of emitted light.

HEATING AND COOLING

- Programmable thermostats can be programmed to meet your family's life style. The thermostat will turn heat down automatically when you depart and up again when you return.
- In the summer fans can be used to circulate the air to make you feel cooler and used in the winter on reverse cycle to pull the heat down from the ceiling and circulate to make you feel warmer.
- Set thermostat at 78 degrees in the summer and 68 degrees in the winter.
- Insulate and tape ductwork
- Annual "checkup" for system
- Monthly filter cleaning or replacement
- Heat is constantly lost or gained in a home - 30 percent through the attic and 10 percent each through wall and floors
- Since heat moves from hot to cold areas, the idea of insulation is to create a barrier of resistance. The greater the R-factor, the better insulating power. Recommended R-factor is 30 for ceilings and 11 for walls.
- If the attic has 4 or more inches of insulation, added insulation is not vital. If there is less or no insulation, consider adding 6 to 9 inches of batt or blanket insulation or 6 to 12 inches of blown-in insulation.



ENERGY *tips* **from** TVEC TRINITY VALLEY ELECTRIC

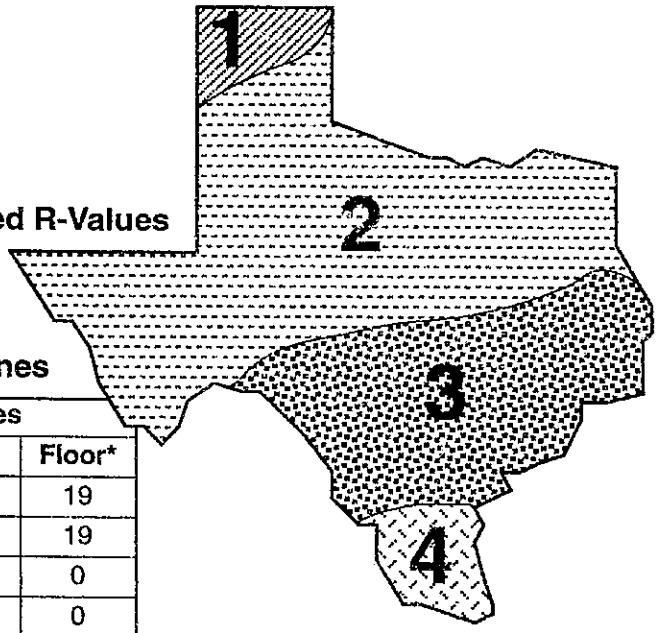
Additional Lighting and Heating and Cooling Tips

THICKNESS IN INCHES FOR INSULATION TO OBTAIN R-VALUES*					
	BATTS or BLANKETS		LOOSE and BLOWN FILL		
R-Value	Fiberglass	Mineral Wool	Fiberglass	Cellulose	Vermiculite
R-11	4 – 5 1/4	3 1/4 – 3 3/4	4	3 3/4	5 1/2
R-19	7 – 8 3/4	5 3/4 – 6 1/4	8	6 1/2	9
R-30	11 – 14	9 – 9 1/2	12	10 1/2	14 1/2
R-38	14 – 17 3/4	11 1/2 – 12	17	13	18

**Consult the manufacturer's recommendation for applications. Specific products may deviate from these nominal thicknesses, and specific R-values depend on material density and aging.*

Source: U.S. Department of Energy

Recommended R-Values for Existing Houses in Four Insulation Zones



	R-Values		
Zone	Ceiling	Walls	Floor*
1	38	11	19
2	30	11	19
3	30	11	0
4	19	11	0

*Floors over unheated crawlspaces and basements.

Source: U.S. Dept. of Energy

INSULATION CHECKLIST

- ❑ Check with electric cooperative for R-level recommendation
- ❑ Inspect current insulation for type, condition, and level
- ❑ Inspect vapor barriers
- ❑ Add appropriate type of insulation to bring to recommended R-level
- ❑ Keep insulation at least three inches from heat producers

FIREPLACE CHECKLIST

- ❑ Add glass fireplace doors and keep them closed
- ❑ Check damper fit (insulate in summer) and keep closed when not using fireplace
- ❑ Check into alternatives: outside air vent, fireplace inserts, circulation systems, etc.
- ❑ Keep ash box clean, especially if outside, to provide air source.

ENERGY Tips FOR RENTERS

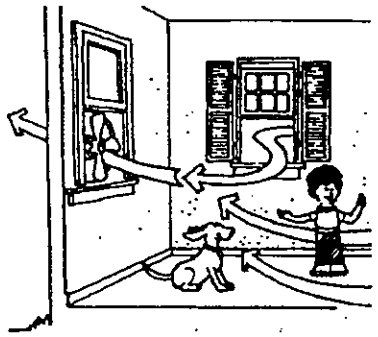
from TRINITY VALLEY ELECTRIC CO-OP

Whether you pay for utilities yourself or they are included in your rent, *you* pay for them. That's why it's important to learn how much energy you use and how to save. If you pay for your utilities directly, there are many simple suggestions in this tips sheet to help you save on electricity and gas.

If your landlord pays for utilities and they're included in your rent, take the steps recommended to avoid *wasting* energy. If you save, you reduce the landlord's cost of operation and that can help prevent rent increases.

COOLING AND HEATING

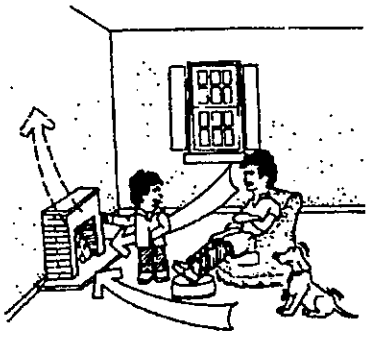
The easiest way to save is to set your thermostat up to 78 degrees during the summer and down to 65 degrees for winter days and 55 degrees for winter nights. Thermostat set-up and set-back can save from 9 to 15 percent of your cooling and heating bills.



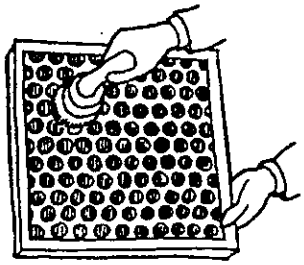
Summer Cooling

- Use fans to supplement your air conditioner. Air movement allows you to set your thermostat 6 to 8 degrees higher and maintain the same comfort level.
- Keep the sun's heat out of your home by lowering shades or closing drapes and curtains.
- When outdoor temperatures are more pleasant, turn off the air conditioner and open the windows to take advantage of natural breezes. Fans again will make you feel more comfortable.
- Dress in light, loose, comfortable clothing.

Winter Heating



- Use the sun to heat your apartment. Open curtains and shades when the sun is shining, and close them at night or on overcast days to keep out the cold.
- Wear warm clothing. This may include sweaters, socks, shawls, and/or long underwear. Wear several layers of clothing.
- Use your fireplace sparingly. In a typical, open-hearth fireplace, about 85 to 90 percent of the firewood's heating value is lost up the chimney in the form of hot combustion flue gases. In addition, heated room air is drawn out of the living space to keep the fire burning.
- When the fire is out, close the flue damper.



Year 'Round

- Seal cracks around windows and doors with inexpensive weatherstripping.
- Change or clean filters on air handling systems regularly. Dirty filters can cause excessive wear on your cooling and heating circulation system, reduce cooling or heating efficiencies, and increase the amount of energy needed to cool or heat your home.

Saving energy is easy . . .

APPLIANCES

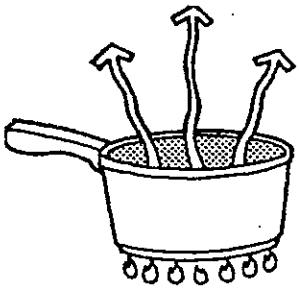
Major appliances account for 20 to 30 percent of all the energy used in the home, whether that's a house or an apartment. So, it will pay to take the following advice.

Water Heating

- Check the temperature of your hot water. If it's above 140 degrees, you can save energy by simply lowering the thermostat setting on the water heater. For most purposes the medium setting should provide sufficiently hot water.
- Have the landlord replace washers on leaky faucets to save hot water.
- When washing dishes in the sink, plug the sink and fill it with water instead of letting water run constantly.
- If you use a dishwasher, stop the machine before it gets to the dry cycle and let dishes dry in the air. Run the dishwasher only when full, and if it has an energy-saver cycle, be sure to use it.
- A 4-minute shower uses less water than a bath. Put a flow restrictor in your showerhead and save even more by cutting water flow from 8 gallons a minute to 2 or 3 gallons per minute.

Food Preparation and Storage

- Toaster ovens, microwave ovens, and slow cookers use less energy than the range-top or oven.
- When you use the oven, bake several items at the same time. Preheat for only 5 minutes (or not at all) and turn off the oven 10 minutes ahead of time.
- Open the refrigerator door as little as possible and close the door quickly. A list of snack food posted on the outside of the refrigerator door helps end refrigerator stare.

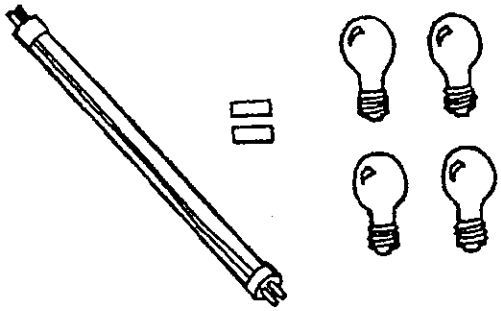


- For oven-cooked meals, turn heat off for the last 10 minutes.
- Clean burner pans often so they reflect more heat.
- Boil only the amount of water you need.
- Allow hot foods to cool to room temperature before refrigerating or freezing them.
- Keep commonly used items in a handy place near the front of the refrigerator.
- Keep the oven door closed rather than opening it to look in.
- Use the right size pan for each burner.
- Keep the freezer as full as possible to save energy.

- When you cook on the range, a cover on the pot will save a third of the energy used without a cover.
- Bake in ceramic or glass instead of metal and you can set your oven thermostat 25 degrees lower on any given recipe.
- Defrost the freezer when the ice is a quarter of an inch thick. More ice on the walls begins to act like a layer of insulation and decreases the efficiency of the freezer.

Lighting and Small Appliances

- Always turn off lights and small appliances when you're not using them.
- Choose light colors when you or your landlord paint. Light-colored walls reflect light so that you need less artificial light.
- Use energy-saver light bulbs that require 10 percent less electricity.
- Use lower wattage bulbs wherever possible and use fluorescent lights when you can. They are 3 to 5 times more efficient and last up to 12 times longer. New compact fluorescent bulbs are now available for use in table lamps and other fixtures designed for incandescent bulbs. Plus, you can take your more efficient bulbs with you when you move.



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ENERGY tips for LANDLORDS and APARTMENT MANAGERS

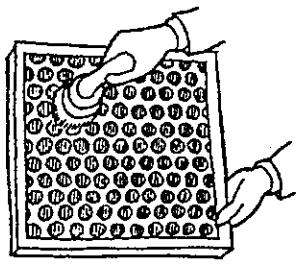
from TRINITY VALLEY ELECTRIC CO-OP

If you are an apartment manager or a landlord, you know that energy consumption can account for a large portion of operating expenses, particularly if the tenants' utilities are included in the rent. If tenants pay their own utility bills, you still may have to pay for energy supplied to common areas such as pools, laundry rooms and parking lots.

This tips sheet contains suggestions on how you can reduce energy use in and around your rental units. By following these tips, you can help keep utility bills and related rent increases under control and make your rental units more comfortable places to live.

Cooling

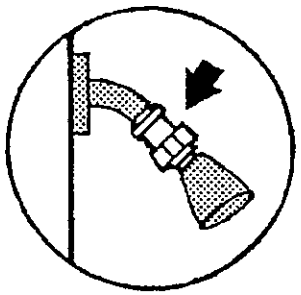
- Install ceiling fans in all units.
- Change or clean filters on air-handling systems regularly. Dirty filters can cause excessive wear on your cooling and heating circulation system and increase the amount of energy needed to cool or heat the units.



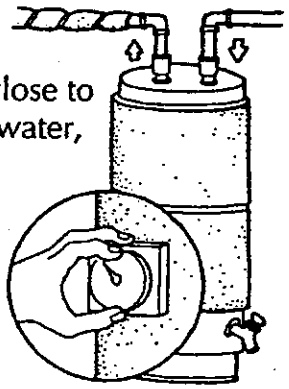
- Add exterior shading to decrease heat gain through windows and to help air conditioner compressors run more efficiently.

Equipment

- Install flow restrictors on faucets and shower heads to save water. Low-flow shower heads cut water flow from 8 gallons per minute to 2 or 3.



- Consider installing energy-saving water heaters and put them close to the greatest use of hot water, usually the kitchen or laundry room. Set the temperature at 120 to 130 degrees F, or medium, and suggest to tenants that they leave it there.



- Install an aerator in kitchen sink faucets. An aerator reduces the amount of water in the flow.
- Replace the washers on leaky faucets to conserve water.
- Consider installing heat pumps if your source of energy for heating is electricity. They use about half as much energy as electric resistance heating.

Painting

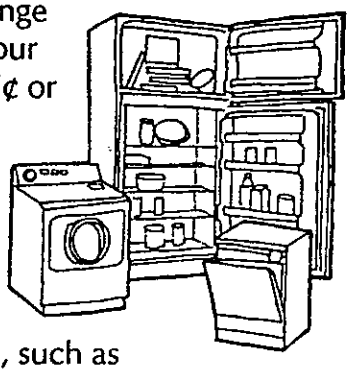
- Paint the exterior of the rental units according to climate. For example, painting a building white helps it reflect more of the sun's radiant heat.

Saving energy is easy . . .

- Choose light colors when painting the interior of the units. Light-colored walls reflect light so that less artificial light is needed.

Appliances

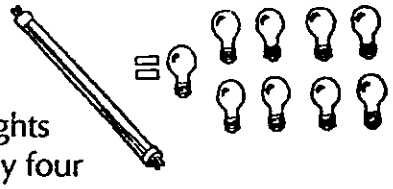
- Be energy conscious when buying appliances for a rental unit. Compare energy-use information and operating costs of similar models. Although more efficient appliances may cost more initially, they will cost less to operate and may last longer.
- Keep in mind when shopping for ranges that an electric range uses 1 kilowatt-hour per meal, about 7¢ or 8¢ worth. A gas range uses about 6¢ worth of gas per meal.



- Install the refrigerator away from heat sources, such as the stove, dishwasher or direct sunlight.
- Keep appliances in good working order. They will last longer, operate more efficiently and use less energy.
- Choose a gas range that has an electric ignition. A pilot light uses 11¢ worth of gas every day.
- Consider purchasing automatic dishwashers: An efficient automatic dishwasher can consume less energy than washing dishes by hand.

Lighting

- Replace incandescent lights with fluorescent lights in kitchens, bathrooms and laundry rooms. Fluorescent lights produce nearly four times as much light per watt as typical incandescent lights and last 9 to 12 times as long.



- Consider installing lighting timers on outside lights. Timers turn lights on and off automatically at pre-set times.

Washer/Dryer

- If you have central laundry rooms in a rental complex, be sure to keep the dryers' lint traps clean. A dirty lint trap slows the flow of air in the dryer so it takes longer and uses more energy to dry laundry.
- If there are washer/dryer connections inside the units, dryers should be vented outside to avoid adding excess moisture to the inside air.

Swimming Pools

- Clean the skimmer and pump-strainer baskets frequently.
- Follow the manufacturer's recommendations for servicing the filter.
- Keep the pool thermostats at 80 to 82 degrees F or below, and operate the pool heater only when the pool is being used.

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ENERGY tips FOR THE ELDERLY

from TRINITY VALLEY ELECTRIC CO-OP

The following tips will help you make your home energy efficient, safe and a more comfortable place to live. By following these simple tips you can be health wise and energy conscious.

Weatherizing

- Put a draft stopper along cracks beneath doors and windows.
- Place movable insulation in windows to block heat gain during the summer and keep the heat indoors during the winter.
- Caulk and weatherstrip around doors and windows to prevent air leakage.
- Install inexpensive gaskets around light switches and electrical outlets to seal against air leaks.
- Control your home's inside temperature with existing curtains, drapes or blinds. Open them in the winter to let warming sunlight in and close them in the summer to keep the heat out.
- Change or clean your heating/cooling unit's filter about once a month when the unit is operating.

Water Heating

- Look for and repair leaky faucets.
- Check your water heater thermostat setting. If the thermostat is set between 140 degrees F and 160 degrees F, or "high", you can reduce the setting to between 110 degrees F and 120 degrees F, or "medium", and save at least $20 a year with an electric water heater or $10 a year with gas. The lower thermostat setting can also prevent scalding.
- Replace your shower head with a low-flow shower head. It can reduce the flow of water from 8 gallons to 3 gallons per minute, and save up to 4,000 gallons of hot water a year.
- Run your dishwasher and washing machine only when they are fully loaded.
- Save even more hot water by using a cold-water laundry detergent so you can wash and rinse with cold water. Normally only very greasy clothes need to be washed in warm or hot water.

Lighting

- Replace two bulbs with one bulb that produces a similar amount of light. For instance, you could replace two 60-watt bulbs with one 100-watt bulb. However, be sure that the fixture is rated to use the higher wattage bulb.
- Change to fluorescent lamps wherever possible by replacing the entire fixture or by changing from incandescent to compact fluorescent bulbs. The initial cost of a compact fluorescent bulb is more than an incandescent bulb, but it can last up to 12 times longer and produce less heat, which will reduce the load on your air conditioner.
- Keep light fixtures clean. Dust can absorb up to 20 percent of emitted light.

Cooking

- Cook several foods at one time when using your oven. Prepare dishes that can be stored or frozen for later use.
- Bake food in glass pans. Glass pans allow you to reduce the oven temperature by 25 degrees.
- Use small cooking appliances, such as deep fryers, electric skillets, toaster ovens, microwave ovens and pressure cookers. These appliances use less energy than your range or oven.

- Match the size of the pan to the heating element when cooking on the stove. More heat will get to the pan and less will be lost to the surrounding air.
- Place lids on pots when cooking to retain the heat. This will help your food cook faster and keep vitamins from going up in steam.

Winter Tips

To save energy and money during the winter, set the thermostat at about 70 degrees F during the day and at night. For older adults, it's important to avoid the possibility of hypothermia, or lowering of the body temperature. This condition develops when body heat is lost faster than it can be replaced and is particularly common in winter. Because hypothermia can come on gradually, watch for these telltale signs: stiff muscles, shivering, puffiness in the face, or poor coordination. Some tips to save energy and avoid hypothermia include:

- Insulate your home properly.
- Dress warmly.
- Cover your legs with a blanket when reading or watching TV.
- Add an extra blanket at night.
- Avoid prolonged exposure to the cold.
- Get proper rest and drink plenty of fluids.

Summer Tips

To save energy and money during the summer, set your thermostat at 78 degrees F. In addition, guard against hyperthermia, or heat stress, which is a sudden increase in the body temperature. Heat stress can lead to heat exhaustion, heart failure or stroke. Some of the warning signs to watch for include dizziness, rapid heartbeat, diarrhea, nausea, cramps, or dry skin. Blistering Texas summers make heat stress a concern of the elderly. Some tips to save energy and avoid hyperthermia include:

- Dress in cool, loose-fitting clothes that are light in color.
- Wear a hat when you are outdoors or take an umbrella to protect your head and neck.
- Make use of fans; they help to keep the air circulating and aid to remove excess body heat.
- Keep physical activity to a minimum during the hottest part of the day.
- Drink plenty of fluids (check with your doctor).

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